

RATIONALE

FOR

THE TENNESSEE STORM WATER MULTI-SECTOR GENERAL PERMIT FOR INDUSTRIAL ACTIVITIES

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1 Background

The Tennessee Storm Water Multi-Sector General Permit for Industrial Activities (TMSP) is intended to cover storm water discharges to waters of the State of Tennessee from a wide variety of industrial activities and is derived from, and based in large part upon, the Final National Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit for Industrial Activities as promulgated by the Environmental Protection Agency (EPA) in Federal Register / Vol. 60, No. 189 / Friday, September 29, 1995 / Notices (the “Federal Multi-Sector Permit” or FMSP). Because the conditions which affect the presence of pollutants in storm water discharges vary among industries, this permit contains industry-specific sections (Sectors) that describe the storm water pollution prevention plan requirements, the numeric effluent limitations requirements and the monitoring requirements for each permitted industry. These industry-specific sectors are contained in Part XI of this permit and are described in this Rationale. There are also a number of permit requirements that apply to all industries. These requirements may be found in Parts I through X of the permit body. They include the general coverage discussion, the Notice of Intent requirements and the standard permit conditions.

A tabulation of the industrial activities covered by Tennessee’s proposed general permit including references to applicable monitoring requirements for each particular sector and SIC codes is presented below:

SIC Code	Sector A: Timber Products Facilities	Sampling Required?	Table Number
2411	Logging	Yes	A-3
2421	Sawmills and Planing Mills, General	Yes	A-1
2426	Hardwood Dimension and Flooring Mills	Yes	A-4
2429	Special Product Sawmills, NEC	Yes	A-4

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2431	Millwork	Yes	A-4
2435	Hardwood Veneer and Plywood	Yes	A-4
2436	Softwood Veneer and Plywood	Yes	A-4
2439	Structural Wood Members, NEC	Yes	A-4
2441	Nailed and Lock Corner Wood Boxes and Shook	Yes	A-4
2448	Wood Pallets and Skids	Yes	A-4
2449	Wood Containers, NEC	Yes	A-4
2451	Mobile Homes	Yes	A-4
2452	Prefabricated Wood Buildings and Components	Yes	A-4
2491	Wood Preserving	Yes	A-2
2493	Reconstituted Wood Products	Yes	A-4
2499	Wood Products, NEC	Yes	A-4
SIC Code	Sector B: Paper and Allied Products Manufacturing Facilities	Sampling Required?	Table Number
2611	Pulp Mills	No	--
2621	Paper Mills	No	--
2631	Paperboard Mills	Yes	B-1
2652	Setup Paperboard Boxes	No	--
2653	Corrugated and Solid Fiber Boxes	No	--
2655	Fiber Cans, Tubes, Drums, and Similar Products	No	--
2656	Sanitary Food Containers, Except Folding	No	--
2657	Folding Paperboard Boxes, Including Sanitary	No	--
2671	Packaging Paper and Plastics Film, Coated and Laminated	No	--
2672	Coated and Laminated Paper, NEC	No	--
2673	Plastics, Foil, and Coated Paper Bags	No	--
2674	Uncoated Paper and Multiwall Bags	No	--
2675	Die-Cut Paper and Paperboard and Cardboard	No	--
2676	Sanitary Paper Products	No	--
2677	Envelopes	No	--
2678	Stationery, Tablets, and Related Products	No	--
2679	Converted Paper and Paperboard Products, NEC	No	--
SIC Code	Sector C: Chemical and Allied Products Manufacturing Facilities	Sampling Required?	Table Number
2812	Alkalies and Chlorine	Yes	C-3
2813	Industrial Gases	Yes	C-3
2816	Inorganic Pigments	Yes	C-3
2819	Industrial Inorganic Chemicals, NEC	Yes	C-3
2821	Plastics Material Synthetic Resins, and Nonvulcanizable Elastomers	Yes	C-5
2822	Synthetic Rubber	Yes	C-5
2823	Cellulosic Manmade Fibers	Yes	C-5
2824	Manmade Organic Fibers, Except Cellulosic	Yes	C-5
2841	Soaps and Other Detergents, Except Specialty Cleaners	Yes	C-4
2842	Specialty Cleaning, Polishing, and Sanitary Preparations	Yes	C-4
2843	Surface Active Agents, Finishing Agents, Sulfonated Oils, and Assistants	Yes	C-4
2844	Perfumes, Cosmetics, and Other Toilet Preparations	Yes	C-4
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products	No	--
2861	Gum and Wood Chemicals	No	--
2865	Cyclic Organic Crudes and Intermediates, and Organic Dyes and Pigments	No	--
2869	Industrial Organic Chemicals, NEC	No	--
2873	Nitrogenous Fertilizers	Yes	C-2
2874	Phosphatic Fertilizers	Yes	C-2
2875	Fertilizers, Mixing Only	Yes	C-2
2879	Pesticides and Agricultural Chemicals, NEC	Yes	C-2
2891	Adhesives and Sealants	No	--
2892	Explosives	No	--

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2893	Printing Ink	No	--
2895	Carbon Black	No	--
2899	Chemicals and Chemical Preparations, NEC	No	--
SIC Code	Sector D: Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities	Sampling Required?	Table Number
2951	Asphalt Paving Mixtures and Blocks	Yes	D-1
2952	Asphalt Felts and Coatings	Yes	D-1
2992	Lubricating Oils and Greases	No	--
SIC Code	Sector E: Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities	Sampling Required?	Table Number
3211	Flat Glass	No	--
3221	Glass Containers	No	--
3229	Pressed and Blown Glass and Glassware, NEC	No	--
3231	Glass Products, Made of Purchased Glass	No	--
3241	Cement, Hydraulic	No	--
3251	Brick and Structural Clay Tile	Yes	E-1
3253	Ceramic Wall and Floor Tile	Yes	E-1
3255	Clay Refractories	Yes	E-1
3259	Structural Clay Products, NEC	Yes	E-1
3261	Vitreous China Plumbing Fixtures and China and Earthenware Fittings and Bathroom Accessories	No	--
3262	Vitreous China Table and Kitchen Articles	No	--
3263	Fine Earthenware (Whiteware) Table and Kitchen Articles	No	--
3264	Porcelain Electrical Supplies	No	--
3269	Pottery Products, NEC	No	--
3271	Concrete Block and Brick	Yes	E-2
3272	Concrete Products, Except Block and Brick	Yes	E-2
3273	Ready-Mixed Concrete	Yes	E-2
3274	Lime	Yes	E-2
3275	Gypsum Products	Yes	E-2
3281	Cut Stone and Stone Products	No	--
3285	No		--
3295	Minerals and Earths, Ground or Otherwise Treated	No	--
3296	Mineral Wool	No	--
3297	Nonclay Refractories	No	--
3299	Nonmetallic Mineral Products, NEC	No	--
SIC Code	Sector F: Primary Metals Facilities	Sampling Required?	Table Number
3312	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	Yes	F-1
3313	Electrometallurgical Products, Except Steel	Yes	F-1
3315	Steel Wiredrawing and Steel Nails and Spikes	Yes	F-1
3316	Cold-Rolled Steel Sheet, Strip, and Bars	Yes	F-1
3317	Steel Pipe and Tubes	Yes	F-1
3321	Gray and Ductile Iron Foundries	Yes	F-2
3322	Malleable Iron Foundries	Yes	F-2
3324	Steel Investment Foundries	Yes	F-2
3325	Steel Foundries, NEC	Yes	F-2
3331	Primary Smelting and Refining of Copper	No	--
3334	Primary Production of Aluminum	No	--
3339	Primary Smelting and Refining of Nonferrous Metals, Except Copper and Aluminum	No	--
3341	Secondary Smelting and Refining of Nonferrous Metals	No	--
3351	Rolling, Drawing, and Extruding of Copper	Yes	F-3
3353	Aluminum Sheet, Plate, and Foil	Yes	F-3
3354	Aluminum Extruded Products	Yes	F-3

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3355	Aluminum Rolling and Drawing, NEC	Yes	F-3
3356	Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum	Yes	F-3
3357	Drawing and Insulating of Nonferrous Wire	Yes	F-3
3363	Aluminum Die-Castings	Yes	F-4
3364	Nonferrous Die-Castings, Except Aluminum	Yes	F-4
3365	Aluminum Foundries	Yes	F-4
3366	Copper Foundries	Yes	F-4
3369	Nonferrous Foundries, Except Aluminum and Copper	Yes	F-4
3398	Metal Heat Treating	No	--
3399	Primary Metal Products, NEC	No	--
SIC Code	Sector G: Metal Mines (Ore Mining and Dressing) (RESERVED)	Sampling Required?	Table Number
1011	Iron Ores	No	--
1021	Copper Ores	No	--
1031	Lead and Zinc Ores	No	--
1041	Gold Ores	No	--
1044	Silver Ores	No	--
1061	Ferroalloy Ores, Except Vanadium	No	--
1081	Metal Mining Services	No	--
1094	Uranium-Radium-Vanadium Ores	No	--
1099	Miscellaneous Metal Ores, NEC	No	--
SIC Code	Sector H: Inactive Coal Mines and Inactive Coal Mining-Related Facilities	Sampling Required?	Table Number
1221	Bituminous Coal and Lignite Surface Mining	Yes	H-1
1222	Bituminous Coal Underground Mining	Yes	H-1
1231	Anthracite Mining	Yes	H-1
1241	Coal Mining Services	Yes	H-1
SIC Code	Sector I: Oil or Gas Extraction Facilities	Sampling Required?	Table Number
1311	Crude Petroleum and Natural Gas	No	--
1321	Natural Gas Liquids	No	--
1381	Drilling Oil and Gas Wells	No	--
1382	Oil and Gas Field Exploration Services	No	--
1389	Oil and Gas Field Services, NEC	No	--
SIC Code	Sector J: Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities	Sampling Required?	Table Number
1411	Dimension Stone	Yes	J-1
1422	Crushed and Broken Limestone	No	--
1423	Crushed and Broken Granite	No	--
1429	Crushed and Broken Stone, NEC	No	--
1442	Construction Sand and Gravel	Yes	J-1
1446	Industrial Sand	No	--
1455	Kaolin and Ball Clay	No	--
1459	Clay, Ceramic, and Refractory Minerals, NEC	No	--
1474	Potash, Soda, and Borate Minerals	No	--
1475	Phosphate Rock	No	--
1479	Chemical and Fertilizer Mineral Mining, NEC	No	--
1481	Nonmetallic Minerals Services Except Fuels	No	--
1499	Miscellaneous Nonmetallic Minerals, Except Fuels	No	--
SIC Code	Sector K: Hazardous Waste Treatment Storage or Disposal Facilities	Sampling Required?	Table Number
--	Hazardous Waste Treatment Storage or Disposal Facilities (TSDF)	Yes	K-1
SIC Code	Sector L: Landfills and Land Application Sites	Sampling Required?	Table Number

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4953	Refuse Systems	Yes	L-2
SIC Code	Sector M: Automobile Salvage Yards	Sampling Required?	Table Number
5015	Motor Vehicle Parts, Used	Yes	M-1
SIC Code	Sector N: Scrap Recycling and Waste and Recycling Facilities	Sampling Required?	Table Number
5093	Scrap and Waste Materials	Yes	N-1
SIC Code	Sector O: Steam Electric Power Generating Facilities	Sampling Required?	Table Number
4911	Electric Services	Yes	O-1
SIC Code	Sector P: Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities	Sampling Required?	Table Number
4011	Railroads, Line-haul Operating	No	--
4013	Railroad Switching and Terminal Establishments	No	--
4111	Local and Suburban Transit	No	--
4119	Local Passenger Transportation, NEC	No	--
4121	Taxicabs	No	--
4131	Intercity and Rural Bus Transportation	No	--
4141	Local Bus Charter Service	No	--
4142	Bus Charter Service, Except Local	No	--
4151	School Buses	No	--
4173	Terminal and Service Facilities for Motor Vehicle Passenger Transportation	No	--
4212	Local Trucking Without Storage	No	--
4213	Trucking, Except Local	No	--
4214	Local Trucking with Storage	No	--
4215	Couriers Services Except by Air	No	--
4221	Farm Product Warehousing and Storage	No	--
4222	Refrigerated Warehousing and Storage	No	--
4225	General Warehousing and Storage	No	--
4226	Special Warehousing and Storage, NEC	No	--
4231	Terminal and Joint Terminal Maintenance Facilities for Motor Freight Transportation	No	--
4311	United States Postal Service	No	--
5171	Petroleum Bulk Stations and Terminals	No	--
SIC Code	Sector Q: Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities	Sampling Required?	Table Number
4412	Deep Sea Foreign Transportation of Freight	Yes	Q-1
4424	Deep Sea Domestic Transportation of Freight	Yes	Q-1
4432	Freight Transportation on the Great Lakes - St. Lawrence Seaway	Yes	Q-1
4449	Water Transportation of Freight, NEC	Yes	Q-1
4481	Deep Sea Transportation of Passengers, Except by Ferry	Yes	Q-1
4482	Ferries	Yes	Q-1
4489	Water Transportation of Passengers, NEC	Yes	Q-1
4491	Marine Cargo Handling	Yes	Q-1
4492	Towing and Tugboat Services	Yes	Q-1
4493	Marinas	Yes	Q-1
4499	Water Transportation Services, NEC	Yes	Q-1
SIC Code	Sector R: Ship or Boat Building and Repair Yards	Sampling Required?	Table Number
3731	Ship Building and Repairing	No	--
3732	Boat Building and Repairing	No	--
SIC Code	Sector S: Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities	Sampling Required?	Table Number

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4512	Air Transportation, Scheduled	No*	S-1
4513	Air Courier Services	No*	S-1
4522	Air Transportation, Nonscheduled	No*	S-1
4581	Airports, Flying Fields, and Airport Terminal Services	No*	S-1
	* Except for airports that use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: see Part 5: "Monitoring and Reporting Requirements."		
SIC Code	Sector T: Wastewater Treatment Works	Sampling Required?	Table Number
4952	Sewerage Systems	No	--
SIC Code	Sector U: Food and Kindred Products Facilities	Sampling Required?	Table Number
2011	Meat Packing Plants	No	--
2013	Sausages and Other Prepared Meats	No	--
2015	Poultry Slaughtering and Processing	No	--
2021	Creamery Butter	No	--
2022	Natural, Processed, and Imitation Cheese	No	--
2023	Dry, Condensed, and Evaporated Dairy Products	No	--
2024	Ice Cream and Frozen Desserts	No	--
2026	Fluid Milk	No	--
2032	Canned Specialties	No	--
2033	Canned Fruits, Vegetables, Preserves, Jams, and Jellies	No	--
2034	Dried and Dehydrated Fruits, Vegetables, and Soup Mixes	No	--
2035	Pickled Fruits and Vegetables, Vegetables Sauces and Seasonings, and Salad Dressings	No	--
2037	Frozen Fruits, Fruit Juices, and Vegetables	No	--
2038	Frozen Specialties, NEC	No	--
2041	Flour and Other Grain Mill Products	Yes	U-1
2043	Cereal Breakfast Foods	Yes	U-1
2044	Rice Milling	Yes	U-1
2045	Prepared Flour Mixes and Doughs	Yes	U-1
2046	Wet Corn Milling	Yes	U-1
2047	Dog and Cat Food	Yes	U-1
2048	Prepared Feed and Feed Ingredients for Animals and Fowls, Except Dogs and Cats	Yes	U-1
2051	Bread and Other Bakery Products, Except Cookies and Crackers	No	--
2052	Cookies and Crackers	No	--
2053	Frozen Bakery Products, Except Bread	No	--
2061	Cane Sugar, Except Refining	No	--
2062	Cane Sugar Refining	No	--
2063	Beet Sugar	No	--
2064	Candy and Other Confectionery Products	No	--
2066	Chocolate and Cocoa Products	No	--
2067	Chewing Gum	No	--
2068	Salted and Roasted Nuts and Seeds	No	--
2074	Cottonseed Oil Mills	Yes	U-2
2075	Soybean Oil Mills	Yes	U-2
2076	Vegetable Oil Mills, Except Corn, Cottonseed, and Soybeans	Yes	U-2
2077	Animal and Marine Fats and Oils	Yes	U-2
2079	Shortening, Table Oils, Margarine, and Other Edible Fats and Oils, NEC	Yes	U-2
2082	Malt Beverages	No	--
2083	Malt	No	--
2084	Wines, Brandy, and Brandy Spirits	No	--
2085	Distilled and Blended Liquors	No	--
2086	Bottled and Canned Soft Drinks and Carbonated Waters	No	--
2087	Flavoring Extracts and Flavoring Syrups NEC	No	--
2091	Canned and Cured Fish and Seafood	No	--

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2092	Prepared Fresh or Frozen Fish and Seafoods	No	--
2095	Roasted Coffee	No	--
2096	Potato Chips, Corn Chips, and Similar Snacks	No	--
2097	Manufactured Ice	No	--
2098	Macaroni, Spaghetti, Vermicelli, and Noodles	No	--
2099	Food Preparations, NEC	No	--
2111	Cigarettes	No	--
2121	Cigars	No	--
2131	Chewing and Smoking Tobacco and Snuff	No	--
2141	Tobacco Stemming and Redrying	No	--
SIC Code	Sector V: Textile Mills, Apparel and other Fabric Product Manufacturing Facilities	Sampling Required?	Table Number
2211	Broadwoven Fabric Mills, Cotton	No	--
2221	Broadwoven Fabric Mills, Manmade Fiber and Silk	No	--
2231	Broadwoven Fabric Mills, Wool (Including Dyeing and Finishing)	No	--
2241	Narrow Fabric and Other Smallware Mills: Cotton, Wool, Silk, and Manmade Fiber	No	--
2251	Women's Full-Length and Knee-Length Hosiery, Except Socks	No	--
2252	Hosiery, NEC	No	--
2253	Knit Outerwear Mills	No	--
2254	Knit Underwear and Nightwear Mills	No	--
2257	Weft Knit Fabric Mills	No	--
2258	Lace and Warp Knit Fabric Mills	No	--
2259	Knitting Mills, NEC	No	--
2261	Finishers of Broadwoven Fabrics of Cotton	No	--
2262	Finishers of Broadwoven Fabrics of Manmade Fiber and Silk	No	--
2269	Finishers of Textiles, NEC	No	--
2273	Carpets and Rugs	No	--
2281	Yarn Spinning Mills	No	--
2282	Yarn Texturizing, Throwing, Twisting, and Winding Mills	No	--
2284	Thread Mills	No	--
2295	Coated Fabrics, Not Rubberized	No	--
2296	Tire Cord and Fabrics	No	--
2297	Nonwoven Fabrics	No	--
2298	Cordage and Twine	No	--
2299	Textile Goods, NEC	No	--
2311	Men's and Boys' Suits, Coats and Overcoats	No	--
2321	Men's and Boys' Shirts, Except Work Shirts	No	--
2322	Men's and Boys' Underwear and Nightwear	No	--
2323	Men's and Boys' Neckwear	No	--
2325	Men's and Boys' Trousers and Slacks	No	--
2326	Men's and Boys' Work Clothing	No	--
2329	Men's and Boys' Clothing, NEC	No	--
2331	Women's, Misses', and Juniors' Blouses and Shirts	No	--
2335	Women's, Misses' and Junior's Dresses	No	--
2337	Women's, Misses' and Juniors' Suits, Skirts and Coats	No	--
2339	Women's, Misses' and Juniors' Outerwear, NEC	No	--
2341	Women's, Misses, Children's, and Infants' Underwear and Nightwear	No	--
2342	Brassieres, Girdles, and Allied Garments	No	--
2353	Hats, Caps, and Millinery	No	--
2361	Girls', Children's and Infants' Dresses, Blouses and Shirts	No	--
2369	Girls', Children's and Infants' Outerwear, NEC	No	--
2371	Fur Goods	No	--
2381	Dress and Work Gloves, Except Knit and All-Leather	No	--
2384	Robes and Dressing Gowns	No	--

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2385	Waterproof Outerwear	No	--
2386	Leather and Sheep-Lined Clothing	No	--
2387	Apparel Belts	No	--
2389	Apparel and Accessories, NEC	No	--
2391	Curtains and Draperies	No	--
2392	House furnishings, Except Curtains and Draperies	No	--
2393	Textile Bags	No	--
2394	Canvas and Related Products	No	--
2395	Pleating, Decorative and Novelty Stitching, and Tucking for the Trade	No	--
2396	Automotive Trimmings, Apparel Findings, and Related Products	No	--
2397	Schiffli Machine Embroideries	No	--
2399	Fabricated Textile Products, NEC	No	--
SIC Code	Sector W: Furniture and Fixture Manufacturing Facilities	Sampling Required?	Table Number
2434	Wood Kitchen Cabinets	No	--
2511	Wood Household Furniture, Except Upholstered	No	--
2512	Wood Household Furniture, Upholstered	No	--
2514	Metal Household Furniture	No	--
2515	Mattresses, Foundations, and Convertible Beds	No	--
2517	Wood Television, Radio, Phonograph and Sewing Machine Cabinets	No	--
2519	Household Furniture, NEC	No	--
2521	Wood Office Furniture	No	--
2522	Office Furniture, Except Wood	No	--
2531	Public Building and Related Furniture	No	--
2541	Wood Office and Store Fixtures, Partitions, Shelving, and Lockers	No	--
2542	Office and Store Fixtures, Partitions Shelving, and Lockers, Except Wood	No	--
2591	Draper Hardware and Window Blinds and Shades	No	--
2599	Furniture and Fixtures, NEC	No	--
SIC Code	Sector X: Printing and Platemaking Facilities	Sampling Required?	Table Number
2721	Periodicals: Publishing, or Publishing and Printing	No	--
2732	Book Printing	No	--
2752	Commercial Printing, Lithographic	No	--
2754	Commercial Printing, Gravure	No	--
2759	Commercial Printing, NEC	No	--
2771	Greeting Cards	No	--
2796	Platemaking and Related Services	No	--
SIC Code	Sector Y: Rubber and Miscellaneous Plastic Product Manufacturing Facilities	Sampling Required?	Table Number
3011	Tires and Inner Tubes	Yes	Y-1
3021	Rubber and Plastics Footwear	Yes	Y-1
3052	Rubber and Plastics Hose and Belting	Yes	Y-1
3053	Gaskets, Packing, and Sealing Devices	Yes	Y-1
3061	Molded, Extruded, and Lathe-Cut Mechanical Rubber Products	Yes	Y-1
3069	Fabricated Rubber Products, NEC	Yes	Y-1
3081	Unsupported Plastics Film and Sheet	No	--
3082	Unsupported Plastics Profile Shapes	No	--
3083	Laminated Plastics Plate, Sheet, and Profile Shapes	No	--
3084	Plastic Pipe	No	--
3085	Plastics Bottles	No	--
3086	Plastics Foam Products	No	--
3087	Custom Compounding of Purchased Plastics Resins	No	--
3088	Plastics Plumbing Fixtures	No	--
3089	Plastics Products, NEC	No	--
3931	Musical Instruments	No	--

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3942	Dolls and Stuffed Toys	No	--
3944	Games, Toys, and Children's Vehicles, Except Dolls and Bicycles	No	--
3949	Sporting and Athletic Goods, NEC	No	--
3951	Pens, Mechanical Pencils and Parts	No	--
3952	Lead Pencils, Crayons, and Artist's Materials	No	--
3953	Marking Devices	No	--
3955	Carbon Paper and Inked Ribbons	No	--
3961	Costume Jewelry and Costume Novelties, Except Precious Metals	No	--
3965	Fasteners, Buttons, Needles, and Pins	No	--
3991	Brooms and Brushes	No	--
3993	Signs and Advertising Specialties	No	--
3995	Burial Caskets	No	--
3996	Linoleum, Asphalted-Felt-Base, and Other Hard Surface Floor Coverings, NEC	No	--
3999	Manufacturing Industries, NEC	No	--
SIC Code	Sector Z: Leather Tanning and Finishing Facilities	Sampling Required?	Table Number
3111	Leather Tanning and Finishing	No	--
3143	Men's Footwear, Except Athletic	No	--
SIC Code	Sector AA: Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware	Sampling Required?	Table Number
3411	Metal Cans	Yes	AA-1
3412	Metal Shipping Barrels, Drums, Kegs, and Pails	Yes	AA-1
3421	Cutlery	Yes	AA-1
3423	Hand and Edge Tools, Except Machine Tools and Handsaws	Yes	AA-1
3425	Saw Blades and Handsaws	Yes	AA-1
3429	Hardware, NEC	Yes	AA-1
3431	Enameled Iron and Metal Sanitary Ware	Yes	AA-1
3432	Plumbing Fixture Fittings and Trim	Yes	AA-1
3433	Heating Equipment, Except Electric and Warm Air Furnaces	Yes	AA-1
3441	Fabricated Structural Metal	Yes	AA-1
3442	Metal Doors, Sash, Frames, Molding, and Trim Manufacturing	Yes	AA-1
3443	Fabricated Plate Work (Boiler Shops)	Yes	AA-1
3444	Sheet Metal Work	Yes	AA-1
3446	Architectural and Ornamental Metal Work	Yes	AA-1
3448	Prefabricated Metal Buildings and Components	Yes	AA-1
3449	Miscellaneous Structural Metal Work	Yes	AA-1
3451	Screw Machine Products	Yes	AA-1
3452	Bolts, Nuts, Screws, Rivets, and Washers	Yes	AA-1
3462	Iron and Steel Forgings	Yes	AA-1
3463	Nonferrous Forgings	Yes	AA-1
3465	Automotive Stamping	Yes	AA-1
3469	Metal Stamping, NEC	Yes	AA-1
3471	Electroplating, Plating, Polishing, Anodizing, and Coloring	Yes	AA-2
3479	Coating, Engraving, and Allied Services, NEC	Yes	AA-2
3484	Small Arms	Yes	AA-1
3489	Ordnance and Accessories, NEC	Yes	AA-1
3491	Industrial Valves	Yes	AA-1
3494	Valves and Pipe Fittings, NEC	Yes	AA-1
3495	Wire Springs	Yes	AA-1
3496	Miscellaneous Fabricated Wire Products	Yes	AA-1
3498	Fabricated Pipe and Pipe Fittings	Yes	AA-1
3499	Fabricated Metal Products, NEC	Yes	AA-1
3911	Jewelry, Precious Metal	Yes	AA-1
3914	Silverware, Plated Ware, and Stainless Steel Ware	Yes	AA-1
3915	Jewelers' Findings and Materials, and Lapidary Work	Yes	AA-1

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SIC Code	Sector AB: Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery	Sampling Required?	Table Number
3511	Steam, Gas, and Hydraulic Turbines, and Turbine Generator Set Units	No	--
3519	Internal Combustion Engines, NEC	No	--
3523	Farm Machinery and Equipment	No	--
3524	Lawn and Garden Tractors and Home Lawn and Garden Equipment	No	--
3531	Construction Machinery and Equipment	No	--
3532	Mining Machinery and Equipment, Except Oil and Gas Field Machinery and Equipment	No	--
3533	Oil and Gas Field Machinery and Equipment	No	--
3534	Elevators and Moving Stairways	No	--
3535	Conveyors and Conveying Equipment	No	--
3536	Overhead Traveling Cranes, Hoists and Monorail Systems	No	--
3537	Industrial Trucks, Tractors, Trailers, and Stackers	No	--
3541	Machine Tools, Metal Cutting Type	No	--
3542	Machine Tools, Metal Forming Type	No	--
3543	Industrial Patterns	No	--
3544	Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds	No	--
3545	Cutting Tools, Machine Tool Accessories, and Machinists' Precision Measuring Devices	No	--
3546	Power-Driven Handtools	No	--
3547	Rolling Mill Machinery and Equipment	No	--
3548	Electric and Gas Welding and Soldering Equipment	No	--
3549	Metalworking Machinery, NEC	No	--
3552	Textile Machinery	No	--
3553	Woodworking Machinery	No	--
3554	Paper Industries Machinery	No	--
3555	Printing Trades Machinery and Equipment	No	--
3556	Food Products Machinery	No	--
3559	Special Industry Machinery, NEC	No	--
3561	Pumps and Pumping Equipment	No	--
3562	Ball and Roller Bearings	No	--
3563	Air and Gas Compressors	No	--
3564	Industrial and Commercial Fans and Blowers and Air Purification Equipment	No	--
3565	Packaging Machinery	No	--
3566	Speed Changers, Industrial High-Speed Drives, and Gears	No	--
3567	Industrial Process Furnaces and Ovens	No	--
3568	Mechanical Power Transmission Equipment, NEC	No	--
3569	General Industrial Machinery and Equipment, NEC	No	--
3581	Automatic Vending Machines	No	--
3582	Commercial Laundry, Drycleaning, and Pressing Machines	No	--
3585	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment	No	--
3586	Measuring and Dispensing Pumps	No	--
3589	Service Industry Machinery, NEC	No	--
3592	Carburetors, Pistons, Piston Rings and Valves	No	--
3593	Fluid Power Cylinders and Actuators	No	--
3594	Fluid Power Pumps and Motors	No	--
3596	Scales and Balances, Except Laboratory	No	--
3599	Industrial and Commercial Machinery and Equipment, NEC	No	--
3711	Motor Vehicles and Passenger Car Bodies	No	--
3713	Truck and Bus Bodies	No	--
3714	Motor Vehicle Parts and Accessories	No	--
3715	Truck Trailers	No	--
3716	Motor Homes	No	--

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3721	Aircraft	No	--
3724	Aircraft Engines and Engine Parts	No	--
3728	Aircraft Parts and Auxiliary Equipment, NEC	No	--
3743	Railroad Equipment	No	--
3751	Motorcycles, Bicycles, and Parts	No	--
3761	Guided Missiles and Space Vehicles	No	--
3764	Guided Missile and Space Vehicle Propulsion Units and Propulsion Unit Parts	No	--
3769	Guided Missile Space Vehicle Parts and Auxiliary Equipment, NEC	No	--
3792	Travel Trailers and Campers	No	--
3795	Tanks and Tank Components	No	--
3799	Transportation Equipment, NEC	No	--
SIC Code	Sector AC: Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods	Sampling Required?	Table Number
3571	Electronic Computers	No	--
3572	Computer Storage Devices	No	--
3575	Computer Terminals	No	--
3577	Computer Peripheral Equipment, NEC	No	--
3578	Calculating and Accounting Machines, Except Electronic Computers	No	--
3579	Office Machines, NEC	No	--
3612	Power, Distribution, and Specialty Transformers	No	--
3613	Switchgear and Switchboard Apparatus	No	--
3621	Motors and Generators	No	--
3624	Carbon and Graphite Products	No	--
3625	Relays and Industrial Controls	No	--
3629	Electrical Industrial Apparatus, NEC	No	--
3631	Household Cooking Equipment	No	--
3632	Household Refrigerators and Home and Farm Freezers	No	--
3633	Household Laundry Equipment	No	--
3634	Electric Housewares and Fans	No	--
3635	Household Vacuum Cleaners	No	--
3639	Household Appliances, NEC	No	--
3641	Electric Lamp Bulbs and Tubes	No	--
3643	Current-Carrying Wiring Devices	No	--
3644	Noncurrent-Carrying Wiring Devices	No	--
3645	Residential Electric Lighting Fixtures	No	--
3646	Commercial, Industrial, and Institutional Electric Lighting Fixtures	No	--
3647	Vehicular Lighting Equipment	No	--
3648	Lighting Equipment, NEC	No	--
3651	Household Audio and Video Equipment	No	--
3652	Phonograph Records and Prerecorded Audio Tapes and Disks	No	--
3661	Telephone and Telegraph Apparatus	No	--
3663	Radio and Television Broadcasting and Communication Equipment	No	--
3669	Communications Equipment, NEC	No	--
3671	Electron Tubes	No	--
3672	Printed Circuit Boards	No	--
3674	Semiconductors and Related Devices	No	--
3675	Electronic Capacitors	No	--
3676	Electronic Resistors	No	--
3677	Electronic Coils, Transformers, and Other Inductors	No	--
3678	Electronic Connectors	No	--
3679	Electronic Components, NEC	No	--
3691	Storage Batteries	No	--
3692	Primary Batteries, Dry and Wet	No	--
3694	Electrical Equipment for Internal Combustion Engines	No	--

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3695	Magnetic and Optical Recording Media	No	--
3699	Electrical Machinery, Equipment, and Supplies, NEC	No	--
3812	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical Systems and Instruments	No	--
3821	Laboratory Apparatus and Furniture	No	--
3822	Automatic Controls for Regulating Residential and Commercial Environments and Appliances	No	--
3823	Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products	No	--
3824	Totalizing Fluid Meters and Counting Devices	No	--
3825	Instruments for Measuring and Testing of Electricity and Electrical Signals	No	--
3826	Laboratory Analytical Instruments	No	--
3827	Optical Instruments and Lenses	No	--
3829	Measuring and Controlling Devices, NEC	No	--
3841	Surgical and Medical Instruments and Apparatus	No	--
3842	Orthopedic, Prosthetic, and Surgical Appliances and Supplies	No	--
3843	Dental Equipment and Supplies	No	--
3844	X-Ray Apparatus and Tubes and Related Irradiation Apparatus	No	--
3845	Electromedical and Electrotherapeutic Apparatus	No	--
3851	Ophthalmic Goods	No	--
3861	Photographic Equipment and Supplies	No	--
3873	Watches, Clocks, Clockwork Operated Devices and Parts	No	--
SIC Code	Sector AD: Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)	Sampling Required?	Table Number
9999	Nonclassifiable Establishments	Yes	AD-1
SIC Code	Sector AE: Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)	Sampling Required?	Table Number
9999	Nonclassifiable Establishments	No	--

2 Types of Discharges Covered

This permit covers storm water discharges associated with industrial activity from the 11 industrial categories which the EPA has determined to contain storm water discharges consistent with the EPA's definition of "storm water discharges associated with industrial activity." These 11 categories have been regrouped into the 29 industrial sectors based upon similarities in the nature of the industrial activity, the type of materials handled and material management practices employed. This permit also covers storm water discharges associated with industrial activity from those industries which will not, or are not, covered under sectors A thru AC. This additional sectors referenced herein are sectors AD and AE. It is the intent of the Division that this Sector include those storm water discharges which had previously been covered under the Tennessee Baseline General Permit for Storm Water and which are not covered under Sectors A thru AC, as well as those facilities which had no previous storm water permit that are applying for the first time and will not be covered under Sectors A thru AC. The requirements listed under section AE apply to storm water discharges associated with industrial activity from those facilities that are not covered for such discharges under Sectors A thru AC, but due to nature of manufacturing or industrial process at a site, do **not** require analytical monitoring of storm water runoff.

Generally, the term "storm water discharges associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. This is only part of the extensive definition of such discharges as promulgated by the EPA at 40 CFR §122.26(b)(14). Unlike the

Tennessee Baseline General Permit for Storm Water Discharges Associated with Industrial Activity, Department Rule 1200-4-10-.04, the TMSGP does not exclude all storm water discharges subject to effluent limitation guidelines. Four types of storm water discharges subject to effluent limitation guidelines may be covered under this permit if they are not already subject to an existing or expired NPDES permit. These discharges include contaminated storm water runoff from phosphate fertilizer manufacturing facilities, runoff associated with either asphalt paving or roofing emulsion production, runoff from material storage piles at cement manufacturing facilities and coal pile runoff at steam electric generating facilities. This permit does not, however, authorize all storm water discharges subject to effluent guidelines. Storm water discharges subject to effluent guidelines under 40 CFR §436 or for mine drainage under 40 CFR §440 are not covered under this permit nor are discharges subject to effluent guidelines for acid or alkaline mine drainage under 40 CFR §434.

Because of the broad scope of this permit, most industrial activities currently regulated under the storm water program could be covered by the permit. There are, however, several types of storm water discharges which are not covered under this permit. Storm water discharges subject to an existing industrial NPDES permit are not covered under this permit. The Division of Water Pollution Control believes that in most cases these discharges are more appropriately covered under terms and conditions of their existing permit. These discharges may be covered under this permit only when the existing permit has expired and only when the expired permit did not contain numeric effluent limitations more stringent than those in this permit. Construction activities are not eligible for coverage under this permit. Storm water discharges that were subject to a permit that was terminated as a result of the permittee's request are eligible for coverage under this permit. Storm water discharges from industrial activities that are not addressed in the appropriate section of Part XI of this permit are not eligible for coverage under this permit.

3 Monitoring Requirements

This permit requires analytical monitoring for discharges from certain classes of industrial facilities. The Division believes that industries may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of a storm water pollution prevention plan as discussed in each Sector of the permit. The permit only requires analytical monitoring for the industry sectors or subsectors that demonstrated a potential to discharge pollutants at concentrations of concern.

To determine when such analytical monitoring would be required, the EPA established "benchmark" concentrations for the pollutant parameters on which monitoring results had been received. The "benchmarks" are the pollutant concentrations above which the EPA determined represents a level of concern. The level of concern is a concentration at which a storm water discharge could potentially impair, or contribute to impairing water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by the Division as a level, that if below, a facility represents little potential for water quality concern. As such, the benchmarks also provide an appropriate level to determine whether a facility's storm water pollution prevention measures are successfully implemented. The benchmark concentrations are not effluent limitations and should not be interpreted or construed as such. These values are merely levels which the Division is using to determine if a storm water discharge from any given facility merits further monitoring to insure that the facility has been successful in implementing a storm water pollution prevention plan. As such, these levels represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility. The following table (Table III-A) lists the parameter benchmark values as selected by the Division.

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Table III-A
Parameter Benchmark Values

Parameter Name	TN Benchmark Level	Source (*)
Biochemical Oxygen Demand(5)	30 mg/L	4
Chemical Oxygen Demand	120 mg/L	5
Total Suspended Solids	200 mg/L	14
Oil and Grease	15 mg/L	8
Nitrate + Nitrite Nitrogen	0.68 mg/L	7
Total Phosphorus	2.0 mg/L	6
pH	Range 5.0 - 9.0	14
Acrylonitrile (c)	7.55 mg/L	2
Aluminum, Total (pH 6.5-9)	0.75 mg/L	1
Ammonia	4 mg/L	14
Antimony, Total	0.636 mg/L	9
Arsenic, Total (c)	0.16854 mg/L	9
Benzene	0.01 mg/L	10
Beryllium, Total (c)	0.13 mg/L	2
Butylbenzyl Phthalate	3 mg/L	3
Cadmium, Total (H)	0.0159 mg/L	9
Chloride	860 mg/L	1
Copper, Total (H)	0.0636 mg/L	9
Dimethyl Phthalate	1.0 mg/L	11
Ethylbenzene	0.1 mg/L	14
Fluoranthene	0.042 mg/L	3
Fluoride	1.8 mg/L	6
Iron, Total	5.0 mg/L	12
Lead, Total (H)	0.156 mg/L	15
Magnesium	0.0636 mg/L	13
Mercury, Total	0.0024 mg/L	1
Nickel, Total (H)	2.679 mg/L	15
PCB-1016 (c)	0.000127 mg/L	9
PCB-1221 (c)	0.10 mg/L	10
PCB-1232 (c)	0.000318 mg/L	9
PCB-1242 (c)	0.00020 mg/L	10
PCB-1248 (c)	0.002544 mg/L	9
PCB-1254 (c)	0.10 mg/L	10
PCB-1260 (c)	0.000477 mg/L	9
Phenols, Total	1.0 mg/L	11
Pyrene (PAH,c)	0.01 mg/L	10
Selenium, Total (*)	0.2385 mg/L	9
Silver, Total (H)	0.0318 mg/L	9
Toluene	0.10 mg/L	14
Trichloroethylene (c)	0.0027 mg/L	3
Zinc, Total (H)	0.395 mg/L	15

(*) Sources:

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1. "EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
2. "EPA Recommended Ambient Water Quality Criteria." LOEL Acute Freshwater
3. "EPA Recommended Ambient Water Quality Criteria." Human Health Criteria for Consumption of Water and Organisms
4. Secondary Treatment Regulations (40 CFR 133)
5. Factor of 4 times BOD5 concentration - Tennessee Benchmark
6. North Carolina storm water benchmark derived from NC Water Quality Standards
7. National Urban Runoff Program (NURP) median concentration
8. Median concentration of Storm Water Effluent Limitation Guideline (40 CFR Part 419)
9. Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18
10. Laboratory derived Minimum Level (ML)
11. Discharge limitations and compliance data
12. "EPA Recommended Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater
13. Colorado - Chronic Aquatic Life Freshwater - Water Quality Criteria
14. Best Professional Judgment
15. Cut-off Concentrations for metals that were previously included in TMSP as Criterion Maximum Concentration (CMC) values, and which are hardness and TSS dependent, were adjusted to in-stream allowable criteria using the hardness of 25 mg/L (most conservative assumption as defined in the General Water Quality Criteria) and TSS of 32 mg/L (median value of 4,240 TSS samples reported under previous permit).

Notes:

- (*) Limit established for oil and gas exploration and production facilities only.
(c) carcinogen
(H) hardness dependent
(PAH) Polynuclear Aromatic Hydrocarbon

Assumptions:

Receiving water temperature - 20 C
Receiving water pH - 7.8
Receiving water hardness CaCO₃ - 100 mg/L (except for Lead, Nickel and Zinc, where more conservative value of 25 mg/L was used)
Receiving water salinity - 20 g/kg
Acute to Chronic Ratio (ACR) - 10

As can be seen here, benchmark concentrations were determined based upon a number of existing standards or other sources to represent a level above which water quality concerns could arise. The Division has sought to develop values which can realistically be measured and achieved by industrial facilities. Moreover, storm water discharges with pollutant concentrations occurring below these levels would not warrant further analytical monitoring due to their de minimus potential effect on water quality. The Division believes that each of these benchmark values represents a reasonable level below which water quality impacts should not occur and they, therefore, represent a useful level to assess whether a pollution prevention plan is controlling pollution in the storm water discharges.

4 Administrative Changes in the New TMSP

4.1 References to TDEC's "Field Offices" were changed to "Environmental Assistance Centers."

4.2 References to the Tennessee Baseline General Permit for Storm Water Discharges Associated with Industrial Activity (Rule 1200-4-10-.04, in effect from 1992 to 1997) were removed or updated.

Example of removed verbiage:

Limitations of Coverage, paragraph 6, the following text was deleted:

"(except storm water discharges subject to the Tennessee NPDES General Permit for Storm Water Discharges Associated With Industrial Activity, TN Rule 1200-4-10-.04, promulgated September 26, 1992)."

Example for updated verbiage:

Notification Requirements, Deadlines for Notification, Item 6:

"Facilities previously covered by the Tennessee Baseline General Permit for Storm Water Discharges Associated with Industrial Activity (Rule 1200-4-10-.04) should obtain coverage under this permit."

was updated to:

"Facilities previously covered by the Tennessee Storm Water Multi-Sector General Permit For Industrial Activities should obtain coverage under this permit."

4.3 NOI can be submitted in its original printed form (as found in Addendum B), or as any kind of copy with a valid original signature.

C – Authorization: changed from "[...] using a NOI form as found in Addendum B (or photocopy thereof)" to "[...] using a NOI form as found in Addendum B (or a copy thereof)"

4.4 Notification Requirements for existing facilities (NOI submittal) was changed from May 31, 1997, to 30 days following an effective date of this permit.

II. Notification Requirements; Deadlines for Notification for Existing Facility was changed from "Except as provided in paragraphs II.A.4. (New Operator), and II.A.5. (Late Notification), individuals who intend to obtain coverage for an existing storm water discharge associated with industrial activity under this general permit shall submit an NOI in accordance with the requirements of this part **on or before May 31, 1997**"

to

[...] not more than 30 days following the effective date of this permit.

4.5 Notice of Termination Requirements: the following sentence in paragraph 1 (Facility Information) was deleted: "Describe the location of the approximate center of the site in terms of the latitude and longitude to the nearest 15 seconds, or the section, township and range to the nearest quarter section;"

4.6 A deadline to notify the Division for any facility that is unable to provide the certification for non-storm water discharges (a requirement of SWPPP) was changed from November 30, 1997, to 180 days after submitting an NOI to be covered by this permit.

- 4.7 All references to discharge monitoring reports (DMRs) were changed to storm water monitoring reports**
- 4.8 Storm Water NOIs , as well as Monitoring Reports for Mining and Quarrying Facilities (Sectors H and J) are to be mailed to Mining Section in Knoxville.**
- 4.9 A reference to Section 309c(4) of the Clean Water Act (CWA): *Penalties for Falsification of Reports* is included in the new permit.**

Section 309c(4) of the Clean Water Act (CWA) provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or by both.

4.10 Electronic Submission of Notice of Termination

If the Division notifies dischargers (either directly, by public notice, or by making information available on the Internet) of other Notice of Termination options that become available at a later date (e.g., electronic submission of forms or letters), the permittees may take advantage of those options to satisfy the Notice of Termination notification requirements.

4.11 Electronic Submission of Reports

If the Division notifies dischargers (either directly, by public notice, or by making information available on the Internet) of other options for discharge monitoring report(s) required under Parts XI. and VI.C., and all other storm water monitoring reports submission that become available at a later date (e.g., electronic submission of forms or letters), the permittees may take advantage of those options to satisfy the reporting requirements.

5 Conceptual Changes in the New TMSP

- 5.1 Facilities switching from coverage under an individual NPDES permit to this TMSP permit were given 180 days to revise and 1 year to implement a Storm Water Pollution Prevention Plan, as defined under applicable Sector (Part XI of the TMSP)**
- 5.2 Additional notification (filing a copy of NOI) to a permitted municipal separate storm sewer (MS4) system is not required.**

Deleted text:

Additional Notification

Facilities that discharge storm water associated with industrial activity through large or medium municipal separate storm sewer systems (systems located in an incorporated city with a population of 100,000 or more, or in a county identified as having a large or medium system (see definition in Part X. of this permit and ADDENDUM C of this notice)), or into a municipal separate storm sewer that has been designated by the permitting authority shall, in addition to filing copies of the NOI in accordance with paragraph II.C., submit signed copies of the NOI to the operator of the municipal separate storm sewer

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through which they discharge in accordance with the deadlines in Part II.A. (Deadlines for Notification) of this permit. Mailing addresses for the MS4s are as follow:

Mr. Tom Palko
Dept. of Public Works
Metro Nashville/Davidson Co.
720 South Fifth Street
Nashville, TN 37206

Mr. Tom Scott
Storm Water Management
City of Chattanooga
1001 Lindsay Street
Chattanooga, TN 37402

Mr. James Collins
Memphis Public Works
125 N. Mid America Mall
Memphis, TN 38103

Mr. Ted Schuler
Knoxville Dept. of Engineering
City County Bldg., Suite 480
P.O. Box 1631
Knoxville, TN 37901

Also deleted, from D.) Overview of the Multi-Sector General Permit, paragraph 4:

Addendum C lists large and medium municipal separate storm sewer systems (MS4s). Facilities located in these jurisdictions (cities of Nashville/Davidson Co., Memphis, Knoxville, and Chattanooga) have special responsibilities as described in this permit with regard to compliance with local requirements and providing information to the operator of the MS4.

5.3 Contents of the Notice of Intent section were updated to reflect contents of the new NOI form.

No substantial changes; updated to reflect contents of the new NOI form. The mailing address where correspondence should be sent (official or local contact person) should be the indicated on the NOI. E-mail addresses for both official or local contact person requested. A statement on whether the facility is required to perform certain types of chemical monitoring is not required on the new NOI anymore.

5.4 If the Division notifies dischargers (either directly, by public notice, or by making information available on the Internet) of other NOI form options that become available at a later date (e.g., electronic submission of forms), the permittees may take advantage of those options to satisfy the NOI notification requirements.

5.5 All new and existing facilities that request coverage under this permit must have a storm water pollution prevention plan (SWPPP) prepared and implemented in accordance with Part IV prior to NOI submittal.

5.6 SWPPP Deadlines: Measures That Require Construction: no later than 2 years following the effective date of this permit.

In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 2 years following the effective date of this permit.

5.7 Additional requirements for facilities that discharge into MS4 cities was expanded from those that serve a population of 100,000 or more to ALL cities that are permitted under Phase II MS4 program

Example: Additional Requirements for Storm Water Discharges Associated With Industrial Activity that Discharge Into or Through Municipal Separate Storm Sewer Systems Serving a Population of 100,000 or More

Was changed into:

Additional Requirements for Storm Water Discharges Associated With Industrial Activity that Discharge Into or Through Permitted Municipal Separate Storm Sewer Systems

5.8 SWPPP signature and plan review: facilities are not required to notify the local EAC when SWPPP is completed (since SWPPP has to be prepared and implemented in accordance with Part IV prior to NOI submittal)

The following text has been deleted (B. Signature and Plan Review, Signature/Location):

The permittee must submit a notification letter advising the Division's local Environmental Assistance Center that the SWPPP has been completed in a timely fashion and that it addresses the requirements for SWPPPs as outlined in the permit. This notification letter should be submitted pursuant to the certification and signatory requirements of Parts II.B.7. and VII.G.

5.9 SWPPP: Keeping plans current: Facilities still have to evaluate SW sampling results (if sampling is required for that sector), but chemical sampling of runoff and subsequent evaluation have to be done annually (once per year, every year, up to 5 sampling events during this permit, or a total of 4 sampling events if first four years were "clean," on parameter by parameter basis). Previous permit required SW sampling during second and fourth year (quarterly, up to 8 sampling events, or total of 4 sampling events if first four quarters were "clean," on parameter by parameter basis).

Example: the results obtained from sampling and monitoring pursuant to the Monitoring and Reporting Requirements, as applicable, following the required sampling events during the second and fourth years after this permit issuance to determine whether the facility is below, meets, or exceeds the monitoring cut-off concentrations as shown in Part XI. for that particular industry

Was changed into:

In addition, the permittee shall evaluate the results obtained from sampling and monitoring pursuant to the Monitoring and Reporting Requirements applicable to each sector, following the required annual sampling events to determine whether the facility is below, meets, or exceeds the monitoring cut-off concentrations as shown in Part XI. for that particular industry.

5.10 Notification requirements for a facility that exceeded cut-off concentration(s) during 2 consecutive sampling events were changed (and clarified). Notification (in writing) to the local EAC has to be made 30 days after SW monitoring results were received after EVERY exceedance of cut-off concentration(s). A brief summary of the proposed modifications has to be submitted 60 days after SW monitoring results were received.

Paragraph changed from:

If the results of annual storm water runoff monitoring demonstrate that the facility has exceeded the cut-off concentrations during 2 consecutive sampling events, the permittee must inform the Division's local Environmental Assistance Center within 30 days as to the likely cause of the exceedance(s), review its storm water pollution prevention plan, make any modifications or additions to the plan which would assist in the attainment of monitoring results for specific effluent concentrations which are equal to below the monitoring cut-off concentrations for that facility, and submit to the Division's local Environmental Assistance Center a brief summary of the proposed modifications (including a timetable for implementation) to the SWPPP

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within 60 days of the second exceedance. New owners shall review the existing plan and make appropriate changes. Amendments and modifications to the plan may be reviewed by the Division in the same manner as in Part IV.B.

To:

If the results of annual storm water runoff monitoring demonstrate that the facility has exceeded the cut-off concentration(s), the permittee must inform the Division's local Environmental Assistance Center in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan, make any modifications or additions to the plan which would assist in the attainment of monitoring results for specific effluent concentrations which are equal to below the monitoring cut-off concentrations for that facility, and submit to the Division's local Environmental Assistance Center a brief summary of the proposed SWPPP modifications (including a timetable for implementation).

5.11 Salt Storage Piles have to be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers shall be compliant with this provision upon submittal of the NOI.

Paragraph changed from:

Dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than March 1, 2000. Dischargers with previous coverage under the Baseline general permit for storm water shall be compliant with this provision upon submittal of the NOI.

To:

Dischargers shall be compliant with this provision upon submittal of the NOI.

5.12 Coal Storage Piles (both at steam electric generating facilities and other facilities covered under TMSP) have to be compliant with applicable numeric effluent limitations upon submittal of the NOI.

Paragraph changed from:

Runoff from coal piles located at steam electric generating facilities shall be in compliance with these limits upon submittal of the Notice of Intent (NOI). Runoff from coal piles at all other types of facilities shall comply with these limitations as expeditiously as practicable, but in no case later than March 1, 2000. Dischargers with previous coverage under the Tennessee Baseline General Permit for storm water shall be compliant with this provision upon submittal of the NOI.

To:

Runoff from coal piles shall be compliant with this provision upon submittal of the NOI.

5.13 Only one signed original copy of storm water monitoring report needs to be submitted.

Monitoring And Reporting Requirements, Reporting: Where to Submit, Location: Paragraph changed from: Two (2) signed copies of discharge monitoring reports required under Parts XI. and VI.C., and all other reports required herein, shall be submitted to the Division at the following address [...]

To:

One (1) signed copy of discharge monitoring report(s) required under Parts XI. and VI.C., and all other storm water monitoring reports required herein, shall be submitted to the Division at the following address [...]

5.14 Additional notification requirements for submitting copies of SW monitoring reports to permitted MS4 cities has been removed.

Deleted paragraph:

2. Additional Notification

In addition to filing copies of discharge monitoring reports in accordance with Part VI.B. (Reporting: Where to Submit), facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) or a municipal system designated by the Division must submit signed copies of discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in Part XI. Facilities not required to report monitoring data under Part XI. and facilities that are not otherwise required to monitor their discharges, need not comply with this provision.

Rationale: A copy of SW monitoring report has to be submitted to the state; this data will be entered in a database, which will be provided to MS4 cities or systems.

5.15 Sample type for coal pile runoff was changed to grab, regardless of the presence or size of the holding pond. A reference to holding ponds with 24 hr. retention time and composite/grab sample (most likely retained from the baseline permit) was removed.

Special Monitoring Requirements for Coal Pile Runoff, Sample Type, changed from:

For discharges containing coal pile runoff from holding ponds or other impoundments with a retention period greater than 24 hours (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected), a minimum of one grab sample may be taken. For all other discharges containing coal pile runoff, data shall be reported for a grab sample.

To:

For discharges containing coal pile runoff, data shall be reported for a grab sample.

5.16 References to sampling periods in the sampling waiver for coal pile runoff was removed.

Sampling Waiver was changed from:

When a discharger is unable to collect samples of coal pile runoff due to adverse climatic conditions, the discharger shall collect a substitute sample from a separate subsequent qualifying event in the next period and submit this data along with the data for the routine sample in that period.

To:

When a discharger is unable to collect samples of coal pile runoff due to adverse climatic conditions, the discharger shall collect a substitute sample from a separate subsequent qualifying storm event.

5.17 Signatory Requirements were updated to reflect changes published in 40CFR 122.22 (July 1, 2001 Edition, page 155).

New verbiage:

1. Signatory Requirements for a Notice of Intent

Notice of Intent shall be signed as follows:

a) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or

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(2) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. NOTE: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in § 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under § 122.22(a)(1)(ii) rather than to specific individuals.

b) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or

c) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. Signatory Requirements for Reports

All reports required by the permit and other information requested by the Division shall be signed as follows:

a) All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph G.1. (Signatory Requirements for a Notice of Intent) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph G.1. (Signatory Requirements for a Notice of Intent) of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(3) The written authorization is submitted to the Director.

b) Changes to authorization

If an authorization under paragraph a)(2) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph a)(2) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

c) Certification

Any person signing a document under paragraph a) (1) or (2) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

5.18 The description of activities listed under individual TMSP sections was changed from narrative form to tabular form. The new table also defines if chemical monitoring is required (Yes/No column) and a number of the table containing appropriate cut-off concentrations.

5.19 Analytical Monitoring Requirements were changed from quarterly frequency during years 2 and 4 of the permit to once per year (annually) frequency during every calendar year.

Example:

Analytical Monitoring Requirements. During the period beginning January 1, 1998 lasting through December 31, 1998 and the period beginning January 1, 2000 lasting through December 31, 2000, permittees with timber product facilities must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) during years 2 and 4 except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification).

Was changed into:

During the term of this permit, permittees covered under this sector must monitor their storm water discharges associated with industrial activity at least once per calendar year (annually), except as provided in paragraphs 5.a.(3) (Sampling Waiver), 5.a.(4) (Representative Discharge), and 5.a.(5) (Alternative Certification). For SIC-specific breakdown of monitoring requirements and applicable Monitoring Requirements (listed below), see Table in Part 1 of this industrial sector (1. Discharges Covered Under This Section).

5.20 Sector AE was added; it is identical to Sector AD, except that analytical monitoring is not required.

Rationale: The requirements listed under this section apply to storm water discharges associated with industrial activity from those facilities that are not covered for such discharges under Sectors A thru AC, but due to nature of manufacturing or industrial process at a site, do not require analytical monitoring of storm water runoff.

5.21 Reporting requirements for analytical monitoring were changed to reflect change in monitoring schedule (from quarterly, 2nd and 4th year to annually)

Example of changed paragraph:

Permittees with analytical monitoring requirements shall submit monitoring results for each outfall associated with industrial activity [or a certification in accordance with Sections (3), (4), or (5) above] obtained during the annual reporting period on TMSP Storm Water Monitoring Report Form(s) postmarked **no later than the March 31st of the following calendar year.** For each outfall, one signed TMSP Storm Water Monitoring Report form must be submitted to the Division of Water Pollution Control per storm event sampled. Signed copies of TMSP Storm Water Monitoring Reports, or said certifications, shall be submitted to the following address:

Enforcement and Compliance Section Tennessee Division of Water Pollution Control 6th Floor L & C Annex 401 Church Street Nashville, TN 37243-1534

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5.22 A requirement to collect samples during each quarter during years 2 and 4 was replaced with “any period of a calendar year, as long as the samples are representative of quantity and quality of storm water runoff from the facility.”

Following text:

shall monitor samples collected during the sampling periods of: January through March, April through June, July through September, and October through December for the years specified in paragraph a. (above).
was replaced with:

shall monitor samples collected during any period of a calendar year, as long as the samples are representative of quantity and quality of storm water runoff from the facility.

Rationale:

The following distribution of exceedances was noted during the previous permit term:

	1998	2000
Number of Samples		
1 st Quarter	3232	3375
2 nd Quarter	2841	3518
3 rd Quarter	2539	3245
4 th Quarter	3033	3410
Number of Exceedances		
1 st Quarter	803	710
2 nd Quarter	642	808
3 rd Quarter	611	697
4 th Quarter	667	821
Percent of Exceedances		
1 st Quarter	24.8	21.0
2 nd Quarter	22.6	23.0
3 rd Quarter	24.0	21.5
4 th Quarter	22.0	24.0

It is apparent from the above table that no statistically significant variations in a number or percent of exceedances can be observed for any of the sampled quarters. Therefore, sampling during any period of a calendar year is acceptable, as long as the samples are representative of quantity and quality of storm water runoff from the facility.

5.23 Additional notification for submittal of storm water monitoring reports to MS4 was removed.

Example of a deleted paragraph:

(1) Additional Notification. In addition to filing copies of storm water monitoring reports in accordance with paragraph b (above), asphalt paving and roofing materials manufacturing facilities with at least one storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more) must submit signed copies of storm water monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in paragraph b (above).

5.24 The division will deny the coverage under this general permit if discharges are not protective of federally or state listed threatened and endangered species.

Storm water discharges and storm water discharge-related activities that are not protective of legally protected listed or proposed threatened or endangered aquatic fauna in the receiving stream(s); or discharges or activities that would result in a “take” of a Federally listed endangered or threatened fish or wildlife species; if the State finds that storm water discharges or storm water related activities are likely to result in any of the above effects, the State will deny the coverage under this general permit unless and until project plans are changed to protect the listed species.

5.25 Storm Water Monitoring for Mining and Quarrying Facilities (Sectors H and J) to be performed four times per year (quarterly)

Rationale provided by the Mining Section, in a memo dated March 27, 2001:

“The Mining Section is presently requiring operations covered under the TMSP to monitor on a quarterly basis for the duration of the permit. This action is taken on the basis of Part VI (A)(1)(b) of the TMSP. The requirement is described in our TMSP coverage letter and Fact Sheet.

We recommend that the TMSP be revised to require mining and quarrying operations to conduct quarterly monitoring for the permit term. This would involve monitoring each quarter of each year for the duration of the permit. The existing permit requires chemical monitoring only during the prescribed monitoring period for even numbered years.

TMSP provisions regarding alternate certification and limitations on monitoring would be retained. Presently, the Mining Section has instructed (Fact Sheet) facilities to notify this office prior to pursuing the alternate certification process. We recommend that this procedure be made a part of the new permit. After notification and approval, certifications should be retained in the SWPPP and a copy submitted to the Mining Section office.

Monitoring report forms would be submitted annually. The results of quarterly monitoring for each year would be recorded on the monitoring report forms and submitted by March 31st day of the following year. The current TMSP requires the submittal of monitoring reports on March 31st of the year following the prescribed monitoring period for even numbered years. Inactive facilities would be eligible for sampling waiver and/or alternate certification procedures.

The recommended change of address for submittal of monitoring and related reports is as follows:

Mining and quarrying facilities and related operations covered by the TMSP shall submit two (2) signed copies of the discharge monitoring reports required under Parts X1. and V1.C., and all other reports required herein, to the Division at the following address:

Division of Water Pollution Control
Knoxville Environmental Assistance Center (EAC)
Mining Section
2700 Middlebrook Pike, Suite 220
Knoxville, Tennessee 37921

For each outfall, one Discharge Monitoring Report form must be submitted per storm event sampled.

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The recommendation for quarterly monitoring is based on Best Professional Judgment (BPJ) of the Mining Section. Chemical monitoring on a quarterly basis for each year of the permit is designed to assure that sampling is representative of the monitored activity. EPA and state regulations require the sampling frequency to be representative (i.e. volume and nature of discharge).

Active mining operations are dynamic operations. Soil removal and excavation, especially at sand and gravel mines, can proceed at a rapid pace, changing the contour and landscape significantly over a relatively short period of time. The displacement of soil and removal of minerals can create a large surface area for the placement of materials and products that are exposed to storm water. The frequency of chemical monitoring should keep pace with the progression of mining and be representative of the nature and volume of runoff generated by storm events.”

5.26 Discharges to Water Quality Impaired 303(d) or Water Quality Limited Waters:

- 1. New and Existing Discharges Proposing an Increase of Pollutant Loading: if TMDL is developed, must comply with WLA; if not, no coverage allowed**
- 2. Existing discharges: if TMDL is not developed, coverage available as long as there is no increase of loading; when/if TMDL is developed, the facility must comply with WLA and sample quarterly for a given pollutant; if not, no coverage allowed**

Any operator who intends to obtain authorization under the TMSP for all new and existing storm water discharges to water quality-impaired (303(d)) waters from facilities where there is a reasonable potential to contain pollutants for which the receiving water is impaired must satisfy the following conditions prior to the authorization (for the most recent list of water quality-impaired (303(d)) waters, go to <http://www.state.tn.us/environment/wpc/>). Signature of the NOI (which includes certifying eligibility for permit coverage) will be deemed the operator’s certification that this eligibility requirement has been satisfied.

5.26.1 Requirements for New Discharges or Existing Discharges Proposing an Increase of Pollutant Loading

Prior to submitting a Notice of Intent (NOI) for coverage under the TMSP, the operator should provide an estimate of pollutant loads in storm water discharges from the facility to the Division. This estimate must include the documentation upon which the estimate is based (e.g., sampling data from the facility, sampling data from substantially identical outfalls at similar facilities, modeling, etc.). Existing facilities must base this estimate on actual analytical data, if available.

- a) If a Total Maximum Daily Load (TMDL) has been developed, permit coverage is available only if the operator has received notice from the Division confirming eligibility.

Following receipt of the information regarding an estimate of pollutant loads, the Division anticipates using the following process in making eligibility determinations for new discharges into 303(d) waters where a TMDL has been developed:

- the Division will notify the facility operator that the estimated pollutant load is consistent with the TMDL and that the proposed storm water discharges meet the eligibility requirements of the TMSP and may be authorized under this permit; or
- the Division will notify the facility operator and EPA that the estimated pollutant load is not consistent with the TMDL and that the proposed storm water discharges do not meet the eligibility requirements of the TMSP and can not be authorized under this NPDES permit.

b) If a Total Maximum Daily Load (TMDL) has not been developed, permit coverage for new discharges or existing discharges proposing an increase of pollutant loading is not available under this permit for discharges to 303(d) waters and the operator must seek coverage under a separate (individual) permit.

5.26.2 Requirements for Existing Discharges

c) If a Total Maximum Daily Load (TMDL) has been developed, permit coverage is available only if the operator has received notice from the Division confirming eligibility.

If a TMDL has been developed, the Division will require the operator to provide an estimate of pollutant loads in storm water discharges from the facility. This estimate must include the documentation upon which the estimate is based (e.g., sampling data from the facility, sampling data from substantially identical outfalls at similar facilities, modeling, etc.). Facilities with existing discharges must base this estimate on actual analytical data, if available.

The Division anticipates using the following process in making eligibility determinations for existing discharges into 303(d) waters where a TMDL has been developed:

- the Division will notify the facility operator that the estimated pollutant load is consistent with the TMDL and that the proposed storm water discharges meet the eligibility requirements of the TMSP and may be authorized under this NPDES permit; or
- the Division will notify the facility operator that the estimated pollutant load is not consistent with the TMDL and that the proposed storm water discharges do not meet the eligibility requirements of the TMSP and can not be authorized under this NPDES permit.

d) If a Total Maximum Daily Load (TMDL) has not been developed at the time of permit authorization, coverage under this permit is available only if the pollutant loading from existing facilities remains unchanged or is reduced as a result of additional pollution prevention measures as identified in the facility's Storm Water Pollution Prevention Plan (SWPPP).

If a TMDL is developed during the term of this permit and identifies existing permitted discharges as having a reasonable potential to contain pollutants for which the receiving water is impaired, these discharges shall no longer be authorized by this permit unless, following notification by the Division:

- The operator completes revisions to the Storm Water Pollution Prevention Plan (SWPPP) to include additional and/or modified Best Management Practices (BMPs) designed to comply with any applicable Waste Load Allocation (WLA) established for facility discharges within 14 calendar days following notification by the Division; and
- The operator implements the additional and/or modified BMPs before the next anticipated discharge following revision of the SWPPP; and
- A report is submitted to the Division which documents actions taken to comply with this condition, including estimated pollutant loads, within 30 calendar days following implementation of the additional and/or modified BMPs.

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e) Additional Monitoring for Existing Discharges

The permittee shall perform analytical monitoring for each outfall at least quarterly for any pollutant(s) for which the 303(d) water is impaired where there is a reasonable potential for discharges to contain any or all of these pollutants. Monitoring results should be submitted to the Division (see Reporting: Where to Submit) within 45 calendar days following sample collection. These monitoring requirements are not eligible for any waivers listed elsewhere in the permit.

5.27 Permit Eligibility Regarding Protection of Water Quality Standards and Compliance with State Anti-degradation Requirements: the permittee is required, pursuant to the terms and conditions of this permit, to comply with any applicable Waste Load Allocations (WLA), effluent limitations and schedules of compliance, required to implement applicable water quality standards, to comply with a State Water Quality Plan or other State or Federal laws or regulations, or where practicable, to comply with a standard permitting no discharge of pollutants.

Pursuant to the Rules of the Tennessee Department of Environment and Conservation, Chapter 1200-4-3-.06, titled "Tennessee Antidegradation Statement," and in consideration of the Department's directive in attaining the greatest degree of effluent reduction achievable in municipal, industrial, and other wastes, the permittee shall further be required, pursuant to the terms and conditions of this permit, to comply with any applicable Waste Load Allocations (WLA), effluent limitations and schedules of compliance, required to implement applicable water quality standards, to comply with a State Water Quality Plan or other State or Federal laws or regulations, or where practicable, to comply with a standard permitting no discharge of pollutants.

5.28 Additional SWPPP requirements for new discharges and discharges which constitute an increase of pollutant loading into 303(d) listed waters or high quality waters were incorporated in the permit.

If the Division has notified the facility operator that the estimated pollutant load is consistent with the TMDL and that the proposed storm water discharges meet the eligibility requirements of the TMSP and may be authorized under this permit, additional SWPPP requirements shall apply. Additional SWPPP requirements for new discharges and discharges which constitute an increase of pollutant loading into 303(d) listed waters for a parameter present in the facility's storm water runoff, or discharges upstream of waters impaired by the same parameter, that may affect the impaired waters; and for discharges to waters identified by the Department as high quality waters are as follows:

The Storm Water Pollution Prevention Plan shall be submitted to the appropriate Division's Environmental Assistance Center (see list of EACs on page 10). This plan may be submitted with the NOI, but must be submitted prior to commencement of new industrial activities, or a change of industrial activity that would cause an increase of pollutant loading from the site into 303(d) listed waters or high quality waters.

The permittee shall perform the inspections (as described below) before anticipated storm events (or series of storm events such as intermittent showers over one or more days), and within 24 hours after the end of a storm event of 0.1 inches or greater, at a minimum frequency of once per month.

Qualified personnel shall inspect the areas of facility used for storage of significant materials that are exposed to precipitation, as well as structural and non-structural control measures at the site. Areas used for storage of significant materials that are exposed to precipitation shall be inspected for evidence of, or the

potential for, pollutants entering the drainage system. Outfall points (where discharges from the site enter into 303(d) listed waters or high quality waters) shall be inspected to determine whether structural and non-structural control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected if possible.

Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than 7 days after the need is identified. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

Based on the results of the inspection, the facility description and pollution prevention measures identified in the SWPPP shall be revised as appropriate, but in no case later than 14 calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the plan in no case later than 21 calendar days following the inspection.

Inspections shall be documented and include the scope of the inspection, name(s) and title or qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan (including the location(s) of discharges of pollutants from the site and of any control device that failed to operate as designed or proved inadequate for a particular location), and actions taken to prevent further discharge of pollutants from the site.

The permittee must certify on a quarterly basis that inspections of structural and non-structural control measures and of outfall points were performed and whether or not all planned and designed pollution prevention controls measures are installed and in working order. The certification must be done by a person who meets the signatory requirements of this permit. The certification should be kept with the facility's SWPPP and has to be submitted to the local Environmental Assistance Center upon request.

If the Division finds that a discharge is causing a violation of water quality standards or causing or contributing to the impairment of a 303(d) listed water or any water identified as impaired since promulgation of the latest 303(d) list, and finds that the discharger is complying with storm water pollution prevention plan requirements of this permit, the discharger will be notified by the Director in writing that the discharge is no longer eligible for coverage under the general permit and that continued discharges must be covered by an individual permit. To obtain the individual permit, the operator must file an individual permit application.

5.29 Cut-off Concentrations for metals that were previously included in TMSP as Criterion Maximum Concentration (CMC) values, and which are hardness and TSS dependent, were adjusted to in-stream allowable criteria using the hardness of 25 mg/L (most conservative assumption as defined in the General Water Quality Criteria) and TSS of 32 mg/L (median value of 4240 TSS samples reported under previous permit). This effectively increased cut-of concentrations for Lead, Nickel and Zinc as presented in the following table:

<u>Parameter</u>	<u>Current</u>	<u>New</u>
Lead	0.0816	0.156
Nickel	1.417	2.679
Zinc	0.117	0.395

Metals that were previously included in TMSP as Criterion Maximum Concentration (CMC) values, and for which Fish & Aquatic Life Criteria are expressed as a function of total hardness and total suspended solids (TSS) content are Lead, Nickel and Zinc. The Fish & Aquatic Life criteria for this metal are in the dissolved

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form at laboratory conditions. The in-stream allowable criteria and calculated effluent concentrations are in the total recoverable form.

The values for total hardness and TSS had to be selected to be representative of the conditions typical for all areas of the state of Tennessee, while protective of water quality criteria supporting the designated uses of all waters of the state. The most conservative assumption for hardness for Tennessee was to use the value of 25 mg/L, as stated in the General Water Quality Criteria, Rule 1200-4-3-.03, (3) Fish and Aquatic Life, (g) Toxic Substances: "If criteria are hardness-dependent, the chronic (CCC) and acute (CMC) concentrations shall be based on 25 mg/l hardness if the ambient hardness is less than 25 mg/l. Concentrations shall be based on the actual stream hardness if it is greater than 25 mg/l, however, no hardness greater than 400 mg/l will be used."

The value for TSS of 32 mg/L was based on the median value of 4240 TSS samples as reported under previous TMSP. The average value for the same set of samples (153 mg/L, standard deviation 516) was considered to be too high to be representative of critical conditions and TSS content of any receiving stream across the state of Tennessee.

Criteria for these metals are expressed as a function of total hardness (mg/L), as follows:

$$CMC = \exp\{m_A [\ln(\text{hardness})] + b_A\}$$

$$CCC = \exp\{m_C [\ln(\text{hardness})] + b_C\}$$

	m_A	b_A	m_C	b_C
Lead	1.273	-1.460	1.273	-4.705
Nickel	0.8460	3.3612	0.8460	1.1645
Zinc	0.8473	0.8604	0.8473	0.7614

Using the above formulas in our standardized worksheet, the following values were calculated:

WATER QUALITY CRITERIA CALCULATIONS FOR SELECTED PARAMETERS IN STORM WATER							
Stream (1Q10)		Storm Water Flow	Total Susp. Solids	Hardness (as CaCO ₃)	Stream Allocation		
[MGD]		[MGD]	[mg/l]	[mg/l]	[%]		
Any Flow		Any Flow	32	25	100		

EFFLUENT CHARACTERISTIC	1	2	3	4	5	6	7
	Fish/Aqua. Life Water Quality Criteria		Effluent Fraction	Fish & Aquatic Life Water Quality Criteria			
			Dissolved [Fraction]	In-Stream Allowable		Calc. Effluent Concentration	
	Chronic [ug/l]	Acute [ug/l]		Chronic [ug/l]	Acute [ug/l]	Chronic [ug/l]	Acute [ug/l]
Lead	0.541	13.882	0.089	0.096	156.423	0.1	156.4
Nickel	48.061	438.065	0.164	297.552	2679.251	297.5	2679.3
Zinc	32.287	35.357	0.090	369.551	394.843	369.5	394.8

A description of each data column is as follows:

Column 1: The "Chronic" Fish and Aquatic Life Water Quality Criteria. For Lead, Nickel, and Zinc, this value represents the criteria for the dissolved form at laboratory conditions. The Criteria Continuous Concentration (CCC) is calculated using the equation:

$$CCC = (\exp \{ m_C [\ln (\text{stream hardness})] + b_C \}) (CCF)$$

CCF = Chronic Conversion Factor

This equation and the appropriate coefficients for each metal are from Tennessee Rule 1200-4-3-.03 and the EPA guidance contained in *The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From a Dissolved Criterion* (EPA 823-B-96-007, June 1996). Values for other metals are in the total form and are not hardness dependent; no chronic criteria exists for silver. Published criteria are used for non-metal parameters.

Column 2: The "Acute" Fish and Aquatic Life Water Quality Criteria. For Lead, Nickel, Silver, and Zinc, this value represents the criteria for the dissolved form at laboratory conditions. The Criteria Maximum Concentration (CMC) is calculated using the equation:

$$CMC = (\exp \{ m_A [\ln (\text{stream hardness})] + b_A \}) (ACF)$$

ACF = Acute Conversion Factor

This equation and the appropriate coefficients for each metal are from Tennessee Rule 1200-4-3-.03 and the EPA guidance contained in *The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From a Dissolved Criterion* (EPA 823-B-96-007, June 1996). Values for other metals are in the total form and are not hardness dependent; no acute criteria exists for Total Chromium. Published criteria are used for non-metal parameters.

Column 3: The "Translator" converts the value for dissolved metal at laboratory conditions (columns 2 & 3) to total recoverable metal at in-stream ambient conditions (columns 5 & 6). This factor is calculated using the linear partition coefficients found in *The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From a Dissolved Criterion* (EPA 823-B-96-007, June 1996) and the equation:

$$\frac{C_{\text{diss}}}{C_{\text{total}}} = \frac{1}{1 + \{ [K_{po}] [ss^{(1+a)}] [10^{-6}] \}}$$

ss = in-stream suspended solids concentration [mg/l]

Column 4: The "Chronic" Fish and Aquatic Life Water Quality Criteria at in-stream ambient conditions. This criteria is calculated by dividing the value in column 2 by the value in column 4.

Column 5: The "Acute" Fish and Aquatic Life Water Quality Criteria at in-stream ambient conditions. This criteria is calculated by dividing the value in column 3 by the value in column 4.

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Column 6: The "Chronic" Calculated Effluent Concentration for the protection of fish and aquatic life. This is the Chronic limit.

Column 7: The "Acute" Calculated Effluent Concentration for the protection of fish and aquatic life. This is the Acute limit.

The above described adjustments of cut-off concentrations would affect sampling in 5 instances for Lead, 0 for Nickel, and 13 for Zinc in various sectors of the TMSP.

5.30 Sector Median Value was introduced as a reference value for all permittees classified within a particular sector. Sector Median Value is a pollutant concentration calculated from all sampling results provided from facilities classified in this sector during the previous permit term.

Sector Median Value is a pollutant concentration calculated from all sampling results provided from facilities classified in this sector during the previous permit term. By definition, a median is a statistical term identifying a number that divides numerically ordered data into two equal halves. In easier terms, the median is the middle piece of data when those data are placed in numerical order, or the average of the middle two if there is an even number of items. Therefore, median concentration(s) listed below represents a concentration value typical for and achieved by industries in this sector.

Parameter	Number of Samples	Median Value	Average Value
Sector A			
Aluminum, Total (pH 6.5-9)	54	1.05	4.140
Ammonia	55	0.16	0.980
Arsenic, Total (c)	78	0.0075	0.038
Biochemical Oxygen Demand(5)	58	9.5	23.481
Cadmium, Total (H)	16	43	62.438
Chemical Oxygen Demand	520	43	104.534
Chromium, Total	11	0.01	0.087
Copper, Total (H)	106	0.020	0.034
Iron, Total	48	0.92	4.455
Nitrate + Nitrite Nitrogen	47	0.77	4.779
Oil and Grease	50	4.95	7.976
pH	155	7.36	7.313
Total Phosphorus	9	7.43	7.497
Total Suspended Solids	686	37.1	253.238
Zinc, Total (H)	246	0.0735	2.627
Sector B			
Aluminum, Total (pH 6.5-9)	4	0.48	0.555
Ammonia	26	0.523	1.037
Arsenic, Total (c)	13	0.075	0.069
Biochemical Oxygen Demand(5)	10	7	13.800
Cadmium, Total (H)	25	11	32.050
Chemical Oxygen Demand	179	50	78.082
Cyanide, Total	12	0.01	0.013
Iron, Total	19	0.8	2.449
Lead, Total (H)	13	0.06	0.060
Magnesium	16	1.655	19.256
Mercury, Total	12	0.001	0.001

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Parameter	Number of Samples	Median Value	Average Value
Nitrate + Nitrite Nitrogen	4	13.4	10.850
Oil and Grease	7	0.9	2.286
pH	26	7.15	7.208
Selenium, Total (*)	15	0.1	0.081
Silver, Total (H)	14	0.009	0.009
Total Suspended Solids	63	27	75.721
Zinc, Total (H)	8	1.11	1.723
Sector C			
Aluminum, Total (pH 6.5-9)	211	0.73	2.627
Ammonia	67	1	3.556
Arsenic, Total (c)	14	0.0425	0.042
Biochemical Oxygen Demand(5)	81	10	22.530
Cadmium, Total (H)	4	0.005	0.005
Chemical Oxygen Demand	46	41.45	84.091
Chromium, Total	16	0.0195	0.058
Copper, Total (H)	12	0.35	4.918
Cyanide, Total	8	0.015	0.021
Fluoride	4	4.75	5.375
Iron, Total	260	0.7535	16.492
Lead, Total (H)	73	0.050	0.328
Magnesium	22	3.63	4.453
Mercury, Total	16	0.00045	0.504
Nitrate + Nitrite Nitrogen	277	0.46	31.572
Oil and Grease	71	5	5.192
pH	113	7.4	8.080
Selenium, Total (*)	7	0.1	0.064
Silver, Total (H)	6	0.009	0.008
Total Phosphorus	45	1.4	8.495
Total Suspended Solids	163	18.2	145.639
Zinc, Total (H)	263	0.160	24.790
Sector D			
Aluminum, Total (pH 6.5-9)	4	0.001	0.001
Ammonia	52	0.1	0.252
Biochemical Oxygen Demand(5)	47	3.18	3.487
Chemical Oxygen Demand	1	25	25.000
Oil and Grease	115	1.5	12.970
pH	126	7.9	7.724
Total Phosphorus	1	8.7	8.700
Total Suspended Solids	331	24	96.340
Sector E			
Aluminum, Total (pH 6.5-9)	176	1.15	6.709
Ammonia	23	0.5	0.963
Arsenic, Total (c)	8	0.02	0.029
Biochemical Oxygen Demand(5)	20	7.5	8.877
Cadmium, Total (H)	8	0.02	0.015
Chemical Oxygen Demand	14	20	24.357
Chromium, Total	4	0.02	0.020
Copper, Total (H)	5	0.001	0.002

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Parameter	Number of Samples	Median Value	Average Value
Cyanide, Total	8	0.001	0.008
Fluoride	4	0.001	0.001
Iron, Total	220	1.3	7.900
Lead, Total (H)	10	0.002	0.018
Magnesium	8	0.3705	0.778
Mercury, Total	8	0.0001	0.000
Nitrate + Nitrite Nitrogen	14	0.71	2.000
Oil and Grease	14	2	2.479
pH	105	7.7	7.719
Selenium, Total (*)	8	0.001	0.029
Silver, Total (H)	8	0.001	0.003
Total Phosphorus	4	0.001	0.001
Total Suspended Solids	260	28.5	222.369
Zinc, Total (H)	15	0.1	3.765
Sector F			
Aluminum, Total (pH 6.5-9)	314	1.185	3.678
Ammonia	29	0.6	0.926
Arsenic, Total (c)	5	0.05	0.033
Biochemical Oxygen Demand(5)	36	24.2	42.436
Cadmium, Total (H)	33	0.002	0.004
Chemical Oxygen Demand	43	99.3	166.000
Chromium, Total	33	0.005	0.157
Copper, Total (H)	406	0.029	0.137
Iron, Total	240	1.9	11.198
Lead, Total (H)	30	0.078	0.319
Mercury, Total	2	0.0002	0.000
Nitrate + Nitrite Nitrogen	87	0.58	6.670
Oil and Grease	43	5	5.517
pH	97	7.77	7.913
Selenium, Total (*)	2	0.0275	0.028
Total Suspended Solids	200	50	153.678
Zinc, Total (H)	530	0.16	0.654
Sector J			
Aluminum, Total (pH 6.5-9)	8	18.95	22.588
Ammonia	20	0.09	0.174
Biochemical Oxygen Demand(5)	19	7	51.132
Nitrate + Nitrite Nitrogen	12	0.88	0.815
Oil and Grease	29	0.1	7.069
pH	45	6.7	6.713
Total Suspended Solids	53	45	71.031
Sector K			
Aluminum, Total (pH 6.5-9)	1	0.433	0.433
Ammonia	30	0.21	2.040
Arsenic, Total (c)	25	0.0085	0.050
Biochemical Oxygen Demand(5)	3	0.005	0.005
Cadmium, Total (H)	25	0.01	3.965
Chemical Oxygen Demand	31	20	32.835
Cyanide, Total	28	0.01	0.041

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Parameter	Number of Samples	Median Value	Average Value
Lead, Total (H)	29	0.016	0.040
Magnesium	33	1.41	2.976
Mercury, Total	22	0.0002	0.001
Selenium, Total (*)	27	0.1	0.074
Silver, Total (H)	27	0.009	0.009
Sector L			
Aluminum, Total (pH 6.5-9)	24	1.365	3.005
Ammonia	8	0.405	0.435
Arsenic, Total (c)	2	0.005	0.005
Biochemical Oxygen Demand(5)	7	7	10.571
Cadmium, Total (H)	3	0.003	0.003
Chemical Oxygen Demand	18	71.55	88.956
Chromium, Total	2	0.01	0.010
Copper, Total (H)	44	0.051	0.212
Cyanide, Total	2	0.005	0.005
Fluoride	2	0.2	0.200
Iron, Total	411	2.2	7.341
Lead, Total (H)	30	0.055	0.202
Magnesium	8	5.35	15.916
Nitrate + Nitrite Nitrogen	2	0.63	0.630
pH	10	7.73	7.917
Selenium, Total (*)	2	0.005	0.005
Silver, Total (H)	2	0.005	0.005
Total Phosphorus	2	0.1	0.100
Total Suspended Solids	456	47	146.990
Zinc, Total (H)	25	0.59	3.190
Sector M			
Aluminum, Total (pH 6.5-9)	734	0.743	2.479
Ammonia	32	0.1	0.549
Arsenic, Total (c)	7	0.2	1.672
Biochemical Oxygen Demand(5)	30	6	11.565
Cadmium, Total (H)	1	0.001	0.001
Chemical Oxygen Demand	13	37	50.746
Chromium, Total	1	0.0001	0.000
Copper, Total (H)	12	0.0364	0.053
Cyanide, Total	1	0.001	0.001
Fluoride	1	0.01	0.010
Iron, Total	715	0.767	3.087
Lead, Total (H)	704	0.042	0.104
Magnesium	5	0.042	0.060
Mercury, Total	1	0.0001	0.000
Nitrate + Nitrite Nitrogen	1	0.01	0.010
Oil and Grease	28	2	5.311
pH	39	7.3	7.242
Selenium, Total (*)	1	0.001	0.001
Silver, Total (H)	4	7	75.000
Total Phosphorus	1	0.01	0.010
Total Suspended Solids	744	18	66.136

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Parameter	Number of Samples	Median Value	Average Value
Zinc, Total (H)	29	0.18	0.198
Sector N			
Aluminum, Total (pH 6.5-9)	259	2.08	7.806
Ammonia	5	0.34	0.712
Arsenic, Total (c)	5	0.1	3.290
Biochemical Oxygen Demand(5)	5	12	16.300
Cadmium, Total (H)	3	274	200.002
Chemical Oxygen Demand	241	79	125.404
Chromium, Total	3	0.07	0.056
Copper, Total (H)	245	0.091	0.489
Cyanide, Total	1	0.02	0.020
Fluoride	1	0.3	0.300
Iron, Total	249	3.7	9.915
Lead, Total (H)	239	0.058	2.672
Magnesium	2	0.4545	0.455
Mercury, Total	1	0.0002	0.000
Nitrate + Nitrite Nitrogen	53	0.25	0.449
Oil and Grease	5	16.6	18.920
pH	15	7	6.309
Selenium, Total (*)	1	0.075	0.075
Silver, Total (H)	1	0.007	0.007
Total Phosphorus	4	6.85	5.368
Total Suspended Solids	256	72	208.408
Zinc, Total (H)	238	0.243	1.278
Sector O			
Iron, Total	394	1.9	150.861
Lead, Total (H)	3	0.05	0.933
Total Suspended Solids	80	26	136.935
Sector P			
Aluminum, Total (pH 6.5-9)	18	1.115	2.020
Ammonia	10	0.33	0.763
Biochemical Oxygen Demand(5)	9	15.3	17.326
Chemical Oxygen Demand	12	50	64.917
Copper, Total (H)	8	0.0225	0.022
Iron, Total	21	3.21	23.403
Lead, Total (H)	12	0.042	0.035
Nitrate + Nitrite Nitrogen	6	0.5	0.647
Oil and Grease	6	7.15	6.667
pH	12	7.35	6.924
Total Suspended Solids	26	74.65	617.735
Zinc, Total (H)	13	0.09	0.417
Sector Q			
Aluminum, Total (pH 6.5-9)	16	1.25	3.079
Ammonia	3	4	3.433
Biochemical Oxygen Demand(5)	2	2.05	2.050
Iron, Total	16	1.1	3.252
Lead, Total (H)	9	0.005	0.063
Nitrate + Nitrite Nitrogen	5	1.8	5.940

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Parameter	Number of Samples	Median Value	Average Value
Oil and Grease	3	2	2.000
Total Suspended Solids	3	8	30.000
Zinc, Total (H)	14	0.072	0.236
Sector R			
Ammonia	13	0.13	1.132
Biochemical Oxygen Demand(5)	16	2	9.188
Chemical Oxygen Demand	12	20	20.000
Iron, Total	12	0.345	1.066
Oil and Grease	15	2	2.153
pH	16	8.05	7.988
Total Suspended Solids	28	20.3	45.754
Sector S			
Ammonia	3	2	1.967
Biochemical Oxygen Demand(5)	4	7.5	8.000
Chemical Oxygen Demand	4	28	50.000
pH	4	7.54	7.393
Total Suspended Solids	2	33	33.000
Sector U			
Aluminum, Total (pH 6.5-9)	1	1.1	1.100
Ammonia	63	0.569	3.308
Biochemical Oxygen Demand(5)	223	10	37.415
Chemical Oxygen Demand	222	53	122.564
Fluoride	20	0.495	0.636
Iron, Total	71	0.921	1.264
Lead, Total (H)	1	0.0051	0.005
Nitrate + Nitrite Nitrogen	236	0.49	1.806
Oil and Grease	56	4	8.909
pH	117	7.27	7.235
Total Phosphorus	16	7.4	8.935
Total Suspended Solids	310	31	96.793
Zinc, Total (H)	21	0.083	9.814
Sector V			
Aluminum, Total (pH 6.5-9)	4	0.126	0.361
Ammonia	27	0.29	0.335
Biochemical Oxygen Demand(5)	25	4	5.332
Chemical Oxygen Demand	27	29	28.481
Copper, Total (H)	4	0.006	0.006
Iron, Total	4	0.271	0.471
Oil and Grease	19	3	2.711
pH	30	7.4	7.467
Total Suspended Solids	31	21	51.519
Zinc, Total (H)	4	0.017	0.016
Sector W			
Ammonia	1	0.37	0.370
Chemical Oxygen Demand	13	27	38.923
Oil and Grease	1	5	5.000
pH	1	6.7	6.700
Total Suspended Solids	13	13	20.693

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Parameter	Number of Samples	Median Value	Average Value
Sector Y			
Aluminum, Total (pH 6.5-9)	29	0.5	0.559
Ammonia	35	0.2	0.313
Biochemical Oxygen Demand(5)	40	9.5	13.790
Chemical Oxygen Demand	33	35	52.909
Iron, Total	41	0.22	1.568
Nitrate + Nitrite Nitrogen	27	0.8	1.457
Oil and Grease	26	5	4.931
pH	44	7.2	7.386
Total Suspended Solids	72	41	239.191
Zinc, Total (H)	439	0.11	3.264
Sector AA			
Aluminum, Total (pH 6.5-9)	898	0.6	4.130
Ammonia	104	0.3	0.608
Arsenic, Total (c)	10	0.005	0.013
Biochemical Oxygen Demand(5)	106	9	17.802
Cadmium, Total (H)	22	0.005	0.007
Chemical Oxygen Demand	91	50	66.749
Chromium, Total	82	0.01	0.021
Copper, Total (H)	74	0.038	0.119
Cyanide, Total	17	0.005	0.005
Fluoride	18	0.14	0.361
Iron, Total	891	0.673	4.270
Lead, Total (H)	66	0.042	0.090
Magnesium	6	0.65	0.682
Mercury, Total	10	0.0002	0.000
Nitrate + Nitrite Nitrogen	1022	0.53	4.719
Oil and Grease	84	2.5	5.258
pH	163	7.39	7.167
Selenium, Total (*)	10	0.01	0.019
Silver, Total (H)	10	0.0135	0.024
Total Phosphorus	5	0.059	0.074
Total Suspended Solids	148	18	87.048
Zinc, Total (H)	1033	0.16	1.303
Sector AB			
Aluminum, Total (pH 6.5-9)	53	0.415	1.855
Ammonia	41	0.18	0.495
Biochemical Oxygen Demand(5)	41	11	17.817
Cadmium, Total (H)	1	0.004	0.004
Chemical Oxygen Demand	27	52	127.559
Chromium, Total	1	0.16	0.160
Copper, Total (H)	21	0.041	0.412
Cyanide, Total	1	0.022	0.022
Iron, Total	46	0.715	2.133
Lead, Total (H)	4	1.553	2.439
Nitrate + Nitrite Nitrogen	82	0.795	1.484
Oil and Grease	28	4	7.800
pH	56	7.5	8.884

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Parameter	Number of Samples	Median Value	Average Value
Total Suspended Solids	46	28.45	210.587
Zinc, Total (H)	128	0.11	0.398
Sector AC			
Aluminum, Total (pH 6.5-9)	46	0.6075	22.511
Chromium, Total	1	0.008	0.008
Iron, Total	62	0.505	1.138
Nitrate + Nitrite Nitrogen	50	0.671	2.190
pH	5	7.2	7.400
Total Suspended Solids	9	20	62.933
Zinc, Total (H)	55	0.13	20.383
Sector AD			
Aluminum, Total (pH 6.5-9)	42	0.9	5.799
Ammonia	184	0.29	0.627
Arsenic, Total (c)	29	0.0025	0.013
Biochemical Oxygen Demand(5)	187	6	24.774
Cadmium, Total (H)	33	0.0005	5.577
Chemical Oxygen Demand	214	46.4	87.385
Chromium, Total	2	49.85	49.850
Copper, Total (H)	8	0.01165	0.909
Cyanide, Total	19	0.01	0.008
Fluoride	1	2.98	2.980
Iron, Total	41	1.86	4.404
Lead, Total (H)	49	0.022	0.266
Magnesium	37	0.507	2.444
Mercury, Total	26	0.0008	0.001
Nitrate + Nitrite Nitrogen	28	0.51	0.669
Oil and Grease	131	5	5.397
pH	197	7.3	7.280
Selenium, Total (*)	21	0.0005	0.020
Silver, Total (H)	25	0.00086	0.003
Total Suspended Solids	239	42	203.525
Zinc, Total (H)	52	0.2315	10.548

5.31 Examination of storm water monitoring data in period 1992-1997 (Baseline General SW Permit) and 1997-2001 (TMSP) showed that following parameters will be added to the monitoring list in Sectors C, F and L:

<u>Parameter</u>	<u>Sector/Table</u>
Aluminum, Total	L-1
COD	F-1
Copper, Total	C-3
Magnesium, Total	L-1, C-3

Besides information obtained from storm water monitoring data from TMSP, summarized in the table provided in Paragraph 5.30 (providing information on Parameter, Number of Samples, Median Value and Average Value of storm water monitoring), the data presented in the table below, obtained from the Baseline General SW Permit sampling, was taken under consideration as well. Available data was presented in a graphical form, correlating SIC codes, reported parameter values and TMSP cut-off concentrations. In order to establish any trends, a moving average for 20 data points was superimposed over available data

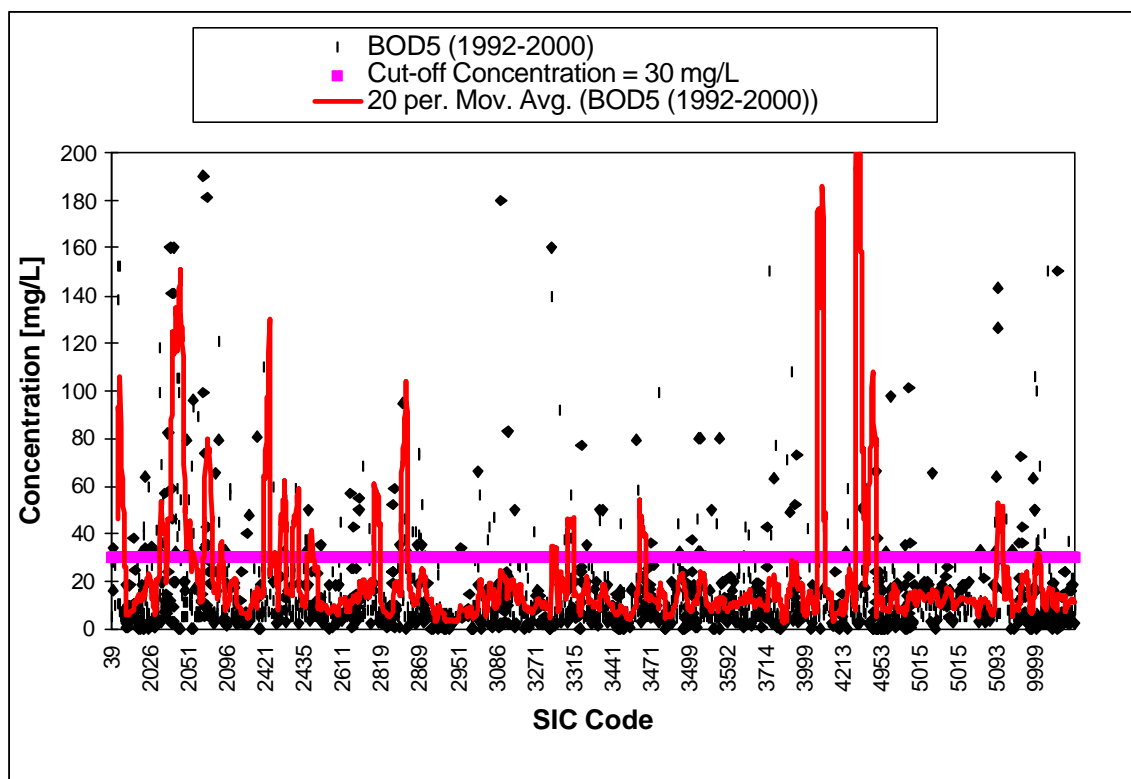
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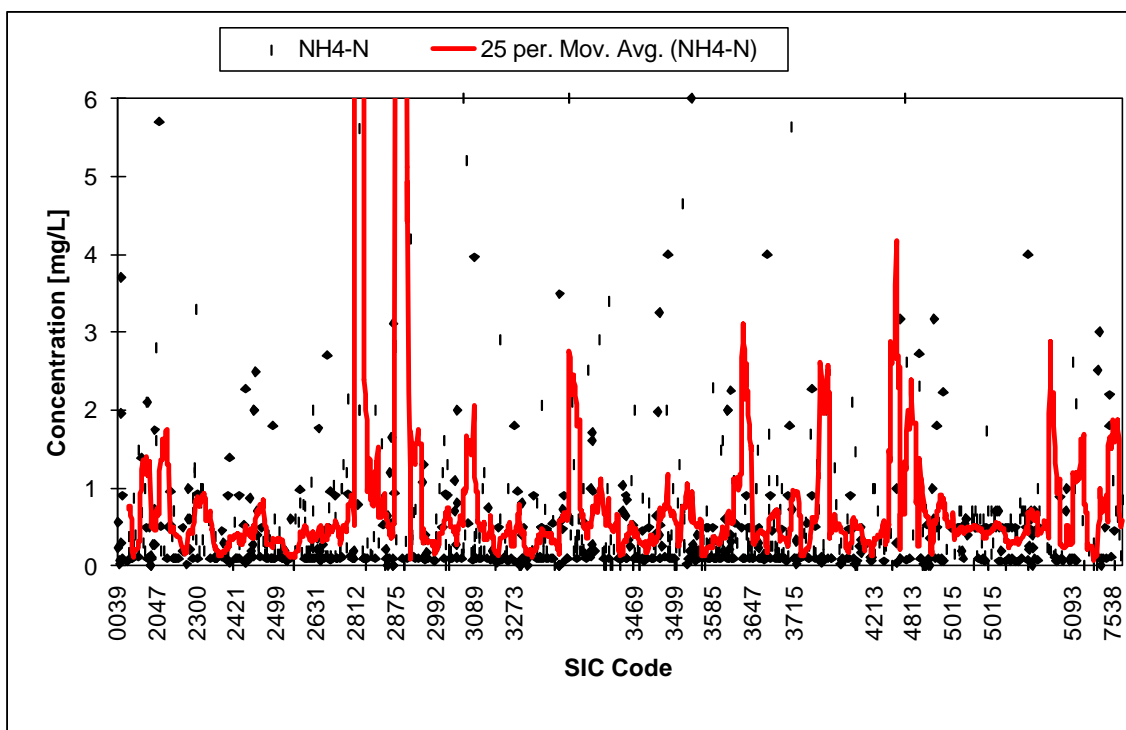
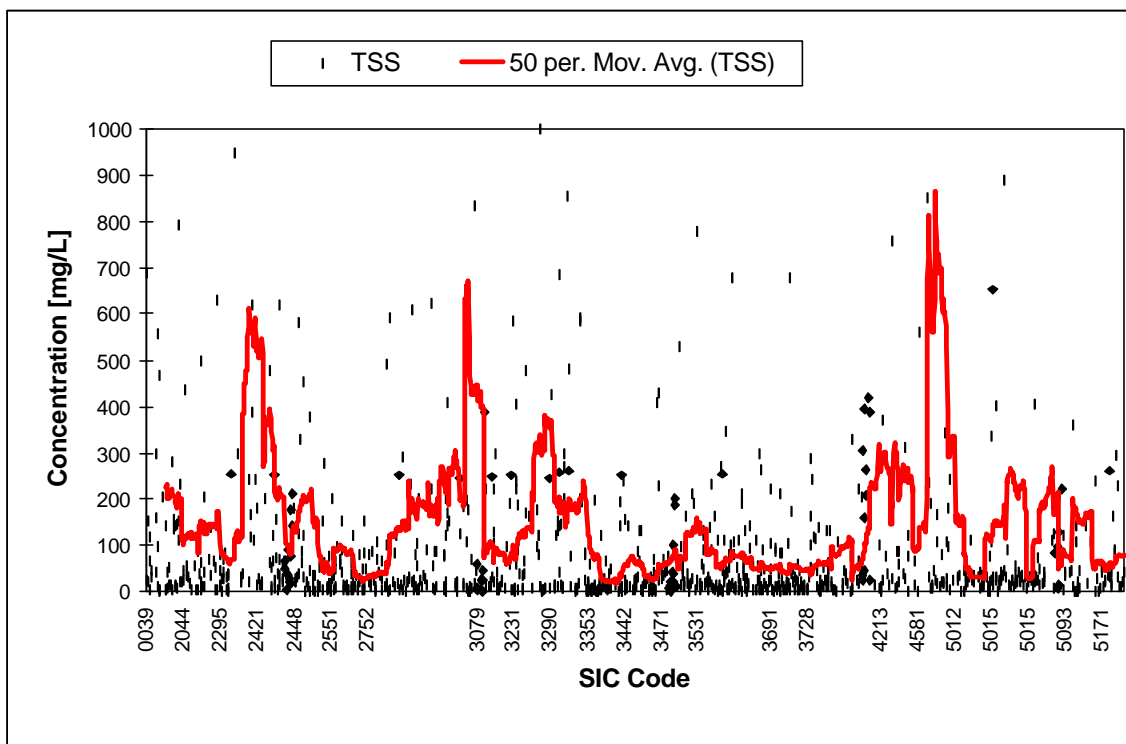
points. Such graphical representation enabled detailed analysis and identification of exceedance trends within SIC code ranges (i.e. sectors). The cut-off concentrations used in tables and graphs are from the current TMSP, not the higher values proposed for the new TMSP. These graphs, presented for parameters of concern, as well as the table with conclusions, are presented on following pages.

		BOD	TSS	NH4-N	Oil & Grease	pH	COD	Al	As	Ba	Cd	CN
AVERAGE		19	213	0.4	7.8	7.3	140	7.1	0.049	0.312	0.008	0.018
STANDARD DEVIATION		66	622	1.1	22.7	1.0	281	8.5	0.060	0.690	0.040	0.019
COUNT		804	818	789	796	796	281	22	74	32	119	55
MAX		1400	9820	21	376	11.4	2207	39.9	0.23	3.7	0.435	0.1
MIN			0	0	0	1.4	0					

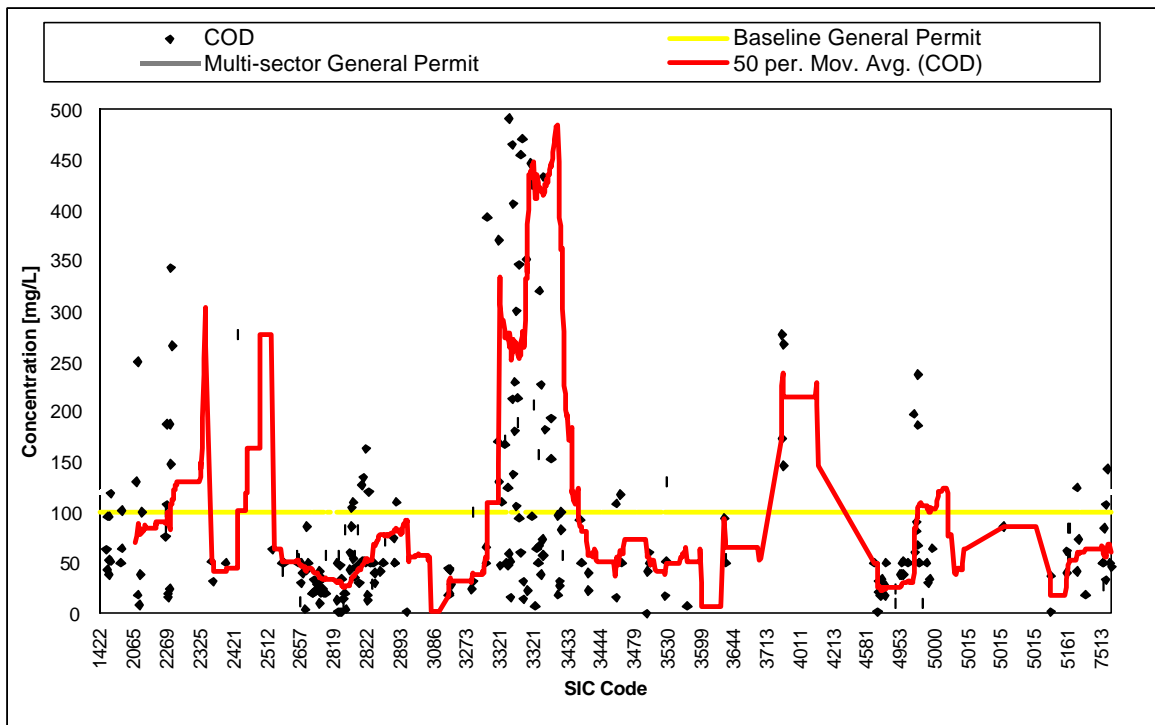
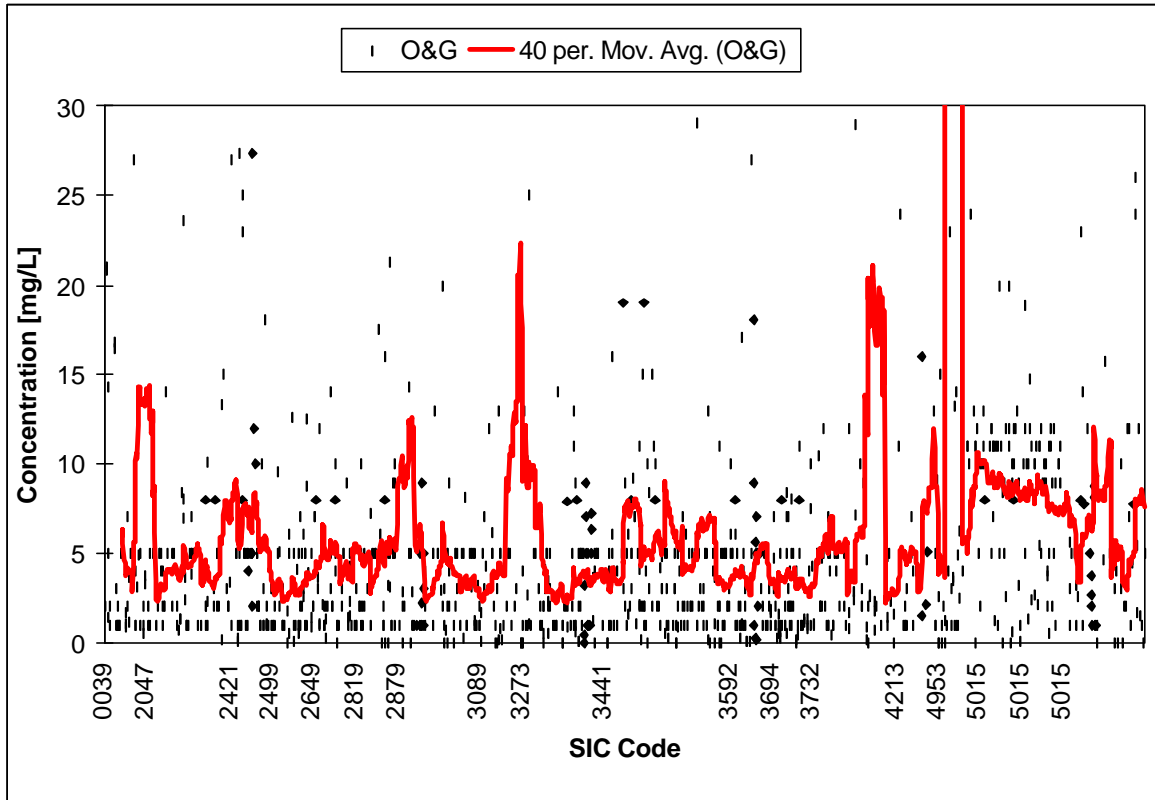
		Cr	Cu	Fe	Hg	Pb	Mg	Mn	Ni	Se	Ag	Zn
AVERAGE		0.027	0.288	14.90	0.00032	0.095	441	0.656	0.035	0.022	0.010	0.674
STANDARD DEVIATION		0.042	1.976	28.33	0.00039	0.224	1988	0.700	0.050	0.026	0.035	1.430
COUNT		168	165	44	44	178	43	19	118	44	46	176
MAX		0.257	25	151.5	0.002	2.03	10100	2.1	0.32	0.075	0.23	10.4

		SURF.	Cl2	BENZENE	Chloroform	P	TDS	TOC	Na	SO4	NO3	PHENOLS
AVERAGE		0.026	0.11	0.0037	437.5004	0.97	559	36	100	99	1.4	0.022
STANDARD DEVIATION		0.022	0.09	0.0036	874.9998	1.18	1042	98	152	258	2.4	0.054
COUNT		2	20	11	4	28	55	36	9	18	28	28
MAX		0.041	0.32	0.01	1750	4.31	4540	595	490	1125	8.6	0.275





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Parameter	Number of Exceedances
Zinc, Total (H)	1731
Aluminum, Total (pH 6.5-9)	1493
Nitrate + Nitrite Nitrogen	805
Iron, Total	741
Total Suspended Solids	660
Copper, Total (H)	344
Chemical Oxygen Demand	339
Lead, Total (H)	223
Biochemical Oxygen Demand(5)	144
Magnesium	121
Cadmium, Total (H)	49
Oil and Grease	49
Total Phosphorus	44
Ammonia	32
pH	30
Arsenic, Total (c)	10
Silver, Total (H)	8
Fluoride	6
Mercury, Total	6
Chromium, Total	3
Cyanide, Total	1
Grand Count of Exceedances	6839
Total Number of Samples	25193

It should be noted that a number of exceedances for Zinc (T) would be reduced from 1,731 to 754 if the above analysis is done using the cut-off concentration proposed in the new TMSP. Similarly, the number of exceedances for Lead (T) would be reduced from 223 to 120.

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Sector	EAC Name and number of Exceedances per Sector							
	Chattanooga	Columbia	Cookeville	Jackson	Johnson City	Knoxville	Memphis	Nashville
A	11	38	283	40	36	38	12	27
B	17	2	--	12	--	20	22	2
C	130	62	15	23	31	17	170	77
D	--	2	--	2	26	1	4	13
E	25	7	14	32	53	41	10	56
F	213	75	31	109	127	118	19	117
J	9	--	--	12	--	9	--	--
K	--	--	--	--	--	19	9	13
L	169	32	1	15	3	18	22	14
M	123	73	39	20	102	130	45	46
N	423	26	12	71	120	144	18	51
O	2	--	--	--	20	46	--	64
P	12	--	--	--	16	--	--	6
Q	--	--	--	--	--	18	--	5
S	--	--	--	--	--	--	1	--
U	6	45	--	46	3	56	104	16
V	--	--	3	--	--	--	--	1
Y	16	69	--	68	48	31	--	25
AA	214	56	77	221	213	190	234	415
AB	8	1	--	--	21	31	41	74
AC	31	--	--	--	--	--	44	6
AD	62	7	6	--	--	37	37	76
Grand Total	1471	495	481	671	819	964	792	1104

Parameter	EAC Name and number of Exceedances per Parameter							
	Chattanooga	Columbia	Cookeville	Jackson	Johnson City	Knoxville	Memphis	Nashville
Aluminum, Total	350	121	99	146	184	232	124	229
Ammonia	1	1	--	4	--	13	8	3
Arsenic, Total (c)	--	--	--	--	8	2	--	--
BOD5	13	8	9	12	3	12	65	22
Cadmium, Total (H)	18	--	12	--	7	7	1	4
COD	61	21	53	34	33	49	58	30
Chromium, Total	--	--	--	--	1	--	--	2
Copper, Total (H)	148	23	14	24	64	43	1	27
Cyanide, Total	--	--	--	--	--	1	--	--
Fluoride	--	--	1	3	--	2	--	--
Iron, Total	197	54	19	61	84	130	60	130
Lead, Total (H)	70	15	5	18	28	43	28	16
Magnesium	6	--	4	--	5	32	57	17
Mercury, Total	--	--	--	--	--	3	3	--
NO2/NO3 Nitrogen	102	57	56	106	73	111	122	172
Oil and Grease	1	6	9	2	11	7	9	4
pH	--	2	1	8	4	2	6	7
Silver, Total (H)	3	--	--	--	4	--	1	--
Total Phosphorus	--	--	9	8	4	10	10	3
TSS	139	70	73	71	68	58	64	113
Zinc, Total (H)	362	117	117	174	238	208	175	325
Grand Total	1471	495	481	671	819	965	792	1104

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	NUMBER OF EXCEEDANCES PER SECTOR																							
COUNTY	A	B	C	D	E	F	J	K	L	M	N	O	P	Q	S	U	V	Y	AA	AB	AC	AD	Grand Total	
Anderson	5	--	--	--	--	--	--	--	6	15	16	9	--	--	--	--	--	8	24	--	--	--	83	
Bedford	--	--	7	--	--	--	--	--	--	17	--	--	--	--	--	21	--	6	--	--	--	--	51	
Benton	--	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	5	
Bledsoe	2	--	--	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	6	--	--	--	11	
Blount	--	--	--	--	2	--	--	--	--	14	--	--	--	--	--	51	--	1	--	--	--	1	70	
Bradley	1	1	7	--	4	--	--	--	12	30	8	--	--	--	--	1	--	--	7	--	--	14	85	
Campbell	--	--	--	--	--	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	
Carroll	--	--	--	--	--	8	--	--	--	--	--	--	--	--	--	--	--	9	13	--	--	--	30	
Carter	--	--	--	17	1	--	--	--	--	22	--	--	--	--	--	--	--	--	50	--	--	--	90	
Cheatham	--	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	--	4	
Chester	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	37	--	--	--	37	
Claiborne	10	--	--	--	--	--	--	--	--	6	--	--	--	--	--	--	--	--	--	--	--	--	16	
Clay	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19	
Cocke	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	24	
Coffee	--	1	--	--	5	--	--	--	--	11	12	--	--	--	--	--	--	17	--	--	--	--	46	
Cumberland	12	--	5	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	31	
Davidson	7	--	14	8	6	38	--	4	3	17	21	--	6	5	--	10	1	5	131	51	--	11	338	
Dickson	4	--	--	--	10	29	--	--	7	--	--	--	--	--	--	--	--	--	32	--	--	--	82	
Dyer	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	15	--	--	--	24	
Fayette	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--	23	
Fentress	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	
Franklin	--	--	--	--	--	--	--	--	9	5	--	--	--	--	--	3	--	--	15	--	--	--	32	
Gibson	--	--	6	--	--	--	--	--	--	11	--	--	--	--	--	--	--	6	14	--	--	--	37	
Giles	2	1	2	--	--	47	--	--	11	--	14	--	--	--	--	8	--	3	--	--	--	--	88	
Grainger	--	--	--	--	--	--	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	9	
Greene	1	--	--	8	28	37	--	--	--	31	56	--	13	--	--	3	--	4	71	8	--	--	260	
Grundy	--	--	--	--	--	--	--	--	5	8	--	--	--	--	--	--	--	--	--	--	--	--	13	
Hamblen	20	12	--	--	--	2	--	--	11	9	--	--	--	--	--	--	--	13	--	31	--	--	98	
Hamilton	2	15	40	--	21	154	9	--	142	13	123	1	--	--	--	5	--	4	147	8	5	48	737	
Hardeman	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--	--	--	5	
Hardin	3	7	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	12	
Hawkins	17	--	--	1	--	18	--	--	--	4	3	20	--	--	--	--	--	4	11	--	--	--	78	
Haywood	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	--	--	--	7	
Henderson	--	--	--	--	--	4	--	--	--	--	24	--	--	--	--	--	--	2	11	--	--	--	41	
Henry	1	--	--	--	--	--	--	--	6	--	--	--	--	--	--	--	--	24	2	--	--	--	33	
Hickman	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	--	--	--	--	40	
Humphreys	--	1	29	--	--	7	--	--	--	--	32	--	--	--	--	--	--	--	--	--	--	--	69	
Jackson	113	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	113	
Jefferson	--	--	--	--	--	--	--	--	--	13	--	--	--	--	--	5	--	--	--	--	--	2	20	
Johnson	--	--	--	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	3	
Knox	2	8	--	1	8	31	--	10	--	34	95	--	--	11	--	--	--	5	121	--	--	13	339	
Lake	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	
Lauderdale	5	--	--	1	--	--	--	--	1	--	35	--	--	--	--	--	--	--	--	--	--	--	42	
Lawrence	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	
Lewis	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	--	1	--	7	16	
Lincoln	--	--	--	--	--	24	--	--	--	10	--	--	--	--	--	13	--	--	--	--	--	--	47	
Loudon	1	--	2	--	--	1	--	--	1	9	--	--	--	7	--	--	--	4	30	--	--	--	55	
Macon	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	
Madison	24	5	15	--	24	89	--	--	--	--	12	--	--	--	--	31	--	4	53	--	--	--	257	
Marion	--	1	--	--	--	59	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--	63	
Marshall	--	--	--	--	--	4	--	--	11	23	--	--	--	--	--	--	--	6	--	--	--	--	44	
Maury	--	--	53	2	--	--	--	--	--	6	--	--	--	--	--	--	--	--	41	--	--	--	102	
McMinn	--	--	39	--	--	--	--	--	1	42	284	--	12	--	--	--	--	9	43	--	3	--	433	
McNairy	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--	7	
Meigs	--	--	--	--	--	--	--	--	--	4	8	--	--	--	--	--	--	--	--	--	--	--	12	
Monroe	--	--	--	--	--	78	9	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--	98	
Montgomery	--	--	7	1	6	26	--	--	1	--	3	--	--	--	--	--	--	6	4	1	--	41	96	
Moore	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	
Obion	3	--	--	1	--	8	--	--	1	7	--	--	--	--	--	15	--	7	69	--	--	--	111	
Overton	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	--	--	--	25	
Perry	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	
Polk	6	--	40	--	--	--	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--	--	63	
Putnam	32	--	--	--	--	--	--	--	--	24	10	--	--	--	--	--	1	--	7	--	--	6	80	
Rhea	--	--	4	--	--	--	--	--	9	6	--	1	--	--	--	--	--	--	11	--	--	--	31	
Roane	--	--	--	--	7	--	--	9	--	7	33	37	--	--	--	--	--	--	--	--	--	21	114	
Robertson	--	--	7	1	--	--	--	9	--	--	--	--	--	--	--	5	--	--	48	16	--	--	86	
Rutherford	--	--	15	1	16	11	--	--	--	13	14	--	--	--	--	1	--	14	34	6	--	19	144	
Sequatchie	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	--	--	23	
Sevier	--	--	6	--	24	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	33	
Shelby	12	21	168	4	8	19	--	9	22	24	--	--	--	--	1	89	--	212	41	44	37	711		
Smith	32	--	--	--	--	21	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	54	

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COUNTY	NUMBER OF EXCEEDANCES	COUNTY	NUMBER OF EXCEEDANCES
Hamilton	737	Chester	37
Shelby	711	Gibson	37
McMinn	433	White	34
Knox	339	Henry	33
Davidson	338	Sevier	33
Greene	260	Franklin	32
Madison	257	Cumberland	31
Washington	202	Rhea	31
Sullivan	169	Carroll	30
Rutherford	144	Williamson	27
Sumner	123	Overton	25
Roane	114	Cocke	24
Jackson	113	Dyer	24
Obion	111	Fayette	23
Maury	102	Sequatchie	23
Hamblen	98	Weakley	22
Monroe	98	Macon	21
Montgomery	96	Jefferson	20
Carter	90	Clay	19
Giles	88	Unicoi	17
Robertson	86	Claiborne	16
Warren	86	Lewis	16
Bradley	85	Wayne	16
Anderson	83	Trousdale	15
Dickson	82	Van Buren	14
Putnam	80	Grundy	13
Wilson	79	Hardin	12
Hawkins	78	Meigs	12
Blount	70	Bledsoe	11
Humphreys	69	Perry	10
Marion	63	Grainger	9
Polk	63	Haywood	7
Tipton	58	McNairy	7
Loudon	55	Campbell	6
Smith	54	Benton	5
Bedford	51	Hardeman	5
Lincoln	47	Cheatham	4
Coffee	46	Fentress	4
Marshall	44	Johnson	3
Lauderdale	42	Lawrence	2
Henderson	41	Lake	1
Stewart	41	Moore	1
Hickman	40		

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Parameter	Number of Exceedances
Aluminum, Total (pH 6.5-9)	1493
Ammonia	32
Arsenic, Total (c)	10
Biochemical Oxygen Demand(5)	144
Cadmium, Total (H)	49
Chemical Oxygen Demand	339
Chromium, Total	3
Copper, Total (H)	344
Cyanide, Total	1
Fluoride	6
Iron, Total	741
Lead, Total (H)	223
Magnesium	121
Mercury, Total	6
Nitrate + Nitrite Nitrogen	805
Oil and Grease	49
pH	30
Silver, Total (H)	8
Total Phosphorus	44
Total Suspended Solids	660
Zinc, Total (H)	1731

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Parameter	Total Number of Samples	Number of Exceedances	% Exceedances
Magnesium	137	121	88
Zinc, Total (H)	3134	1731	55
Aluminum, Total (pH 6.5-9)	2922	1493	51
Total Phosphorus	87	44	51
Nitrate + Nitrite Nitrogen	1961	805	41
Copper, Total (H)	949	344	36
Cadmium, Total (H)	174	49	28
Iron, Total	3795	741	20
Chemical Oxygen Demand	1761	339	19
Lead, Total (H)	1280	223	17
Total Suspended Solids	4240	660	16
Biochemical Oxygen Demand(5)	978	144	15
Fluoride	51	6	12
Silver, Total (H)	97	8	8
Oil and Grease	750	49	7
Arsenic, Total (c)	196	10	5
Ammonia	839	32	4
pH	1397	30	2
Chromium, Total	156	3	2
Cyanide, Total	97	1	1
Mercury, Total	98	0	0
Selenium, Total (*)	94	0	0

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Sector	Number of Exceedances
AA	1620
N	865
F	809
M	578
C	525
A	485
U	276
L	274
Y	257
E	238
AD	225
AB	176
O	132
AC	81
B	75
D	48
K	41
P	34
J	30
Q	23
V	4
R	1
S	1
Grand Count	6798

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Major Industrial Category / Sector	Parameter	SIC Code	Comment
Food and Kindred Products	BOD	20	Included in Current TMSP
Textile Mill Products	COD	2269	Information based on closed facility
Lumber and wood Products	TSS	24	Included in Current TMSP
Wood and Metal Furniture and Fixtures	TSS	25	Not confirmed by TMSP
Paper and Allied Products	TSS	26	Not confirmed by TMSP
Industrial Inorganic Chemicals	O/G	2819	Not confirmed by TMSP
Industrial Inorganic Chemicals	Al	2819	Included in Current TMSP
(Refuse Sysstems) Landfills	Al	4953	Confirmed by TMSP: ADD
Industrial Inorganic Chemicals	Fe	2819	Included in Current TMSP
Primary Metals Industry	COD	33	Confirmed by TMSP: ADD
Primary Metals Industry	TSS	33	Included in Current TMSP
Primary Metals Industry	O/G	33	Not confirmed by TMSP
Industrial Inorganic Chemicals	Cu	2819	Confirmed by TMSP: ADD
Primary Metals Industry	Al	33	Included in Current TMSP
Primary Metals Industry	Cu	33	Included in Current TMSP
Primary Metals Industry	Fe	33	Included in Current TMSP
Primary Metals Industry	Mg	33	Not confirmed by TMSP
Primary Metals Industry	Pb	33	Not confirmed by TMSP
Primary Metals Industry	Zn	33	Included in Current TMSP
Fabricated Metal Products	Cd	34	Not confirmed by TMSP
Fabricated Metal Products	Zn	34	Included in Current TMSP
Electronic and Electrical Equipment	O/G	36	Included in Current TMSP
Electronic and Electrical Equipment	Zn	36	Not confirmed by TMSP
Electronic and Electrical Equipment	Pb	36	Not confirmed by TMSP
Transportation Equipment	O/G	37	Not confirmed by TMSP
Transportation Equipment	COD	37	Not confirmed by TMSP
Transportation Equipment	Cu	37	Not confirmed by TMSP
(Refuse Sysstems) Landfills	Cd	4953	Not confirmed by TMSP
Industrial Inorganic Chemicals, Alkalies and Chlorine	Mg	2812, 2819	Confirmed by TMSP: ADD
(Refuse Sysstems) Landfills	Fe	4953	Included in Current TMSP
(Refuse Sysstems) Landfills	Mg	4953	Confirmed by TMSP: ADD
(Refuse Sysstems) Landfills	Pb	4953	Not confirmed by TMSP
Chemicals and Allied products, wholesale distribution	P	5169	Not confirmed by TMSP

5.32 Parameters for which facilities reported data consistently below cut-off concentrations (no exceedances reported) were removed from the new TMSP monitoring requirements:

<u>Parameter</u>	<u>Sector/Table</u>
Arsenic, Total	K-1

5.33 Definitions of Landfill wastewater and Leachate were included.

Landfill wastewater as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water and contact washwater from washing truck, equipment, and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility. Non-contaminated storm water runoff from landfill is storm water which does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 6.K.4.5. Non-contaminated storm water includes storm water which flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

Leachate is a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

5.34 Prohibition of non-storm water discharges to waters of the State or a municipal separate storm sewer from landfills was expanded to include: the discharge of leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility.

Prohibition of Non-storm Water Discharges. In addition to the broad non-storm water prohibition in Part III.A of today's permit, the discharge of leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility to waters of the State or a municipal separate storm sewer system is not authorized by this permit. Operators with such discharges must obtain coverage under a separate NPDES permit (other than this permit). Discharges from open dumps as defined under RCRA are also not authorized under this permit (e.g., leachate, runoff).

5.35 Numeric Effluent Limitations for Landfills and Land Application Sites were included, as set forth at 40 CFR Part 445 Subpart B.

In addition to the numeric effluent limitations described by Part V.B. of this permit, the following effluent limitations shall be met by existing and new contaminated storm water discharges.

As set forth at 40 CFR Part 445 Subpart B, these numeric limitations apply to contaminated storm water discharges from Municipal Solid Waste Landfills (MSWLFs) which have not been closed in accordance with 40 CFR 258.60, and contaminated storm water discharges from those landfills which are subject to the provisions of 40 CFR Part 257 except for discharges from any of facilities described in (a) through (d) below:

(a) landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operation directly associated with the landfill;

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(b) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service. The concentration of pollutants in storm water discharges shall not exceed the effluent limitations in Table L-1.

Table L-1.
Numeric Effluent Limitations for Landfills and Land Application Sites

Effluent Characteristics	Effluent Limitations (mg/L)	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Biochemical Oxygen Demand (BOD ₅)	140	37
Total Suspended Solids (TSS)	88	27
Ammonia	10	4.9
Alpha Terpineol	0.033	0.016
Benzoic Acid	0.12	0.071
p-Cresol	0.025	0.014
Phenol	0.026	0.015
Zinc (Total)	0.20	0.11
pH	Within the range of 6.0 to 9.0	

5.36 The facility may discontinue permit coverage under TMSP if it is eligible for the “no exposure” permit exemption.

The following text is added to the new TMSP:

The facility may discontinue permit coverage under TMSP if it is eligible for the “no exposure” permit exemption. “No exposure” permit exemption is a conditional exclusion applicable to all categories of industrial activity (except construction activity) with no exposure of industrial materials and activities to storm water. All facilities with point source discharges of storm water associated with industrial activity that satisfy criteria of no exposure and complete a no exposure certification form will be able to obtain exclusion from NPDES storm water permitting under TMSP.

A condition of no exposure exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material

handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. “Sealed ” means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A no exposure certification must be provided for each facility qualifying for the no exposure exclusion. In addition, the exclusion from NPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the no exposure exclusion.

No exposure certification renewals must be submitted five years from the time they are first submitted (assuming the facility still qualifies for the exemption). If conditions change at a facility such that renewed TMSP coverage is needed, the facility may submit an NOI requesting renewed coverage.

Facilities that qualify for and submit a “no exposure” certification are no longer authorized by nor required to comply with this permit. Furthermore, facilities that are no longer required to have permit coverage due to a “no exposure” exclusion, are not required to submit a Notice of Termination.

A copy of no exposure certification form can be obtained by requesting a copy of the form at the address listed below, from the Division’s Environmental Assistance Center responsible for the county where the facility is located (see list of EACs on page 8), or at the Department’s web page for the TMSP (<http://www.state.tn.us/environment/permits/strmh2o.htm>). One (1) signed copy of no exposure certification form shall be submitted to the Division at the following address:

<p>Permit Section – No Exposure Certification Processing Tennessee Division of Water Pollution Control 6th Floor L & C Annex 401 Church Street Nashville, TN 37243-1534</p>
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6 Permit Issuance and Public Notice Procedures

A. This general permit is drafted in accordance with applicable NPDES regulations (40 CFR 122, 123, 124, and 125), the Tennessee Water Quality Control Act (T.C.A. § 69-3-101, et.seq.), and the Department’s permit issuance regulations at TN Rule 1200-4-10-.01, 02, and 03.

B. The applicable regulations for issuance of this general permit are found in 40 CFR 122.28 and 123.44, and the regulations for fact sheet requirements are found in 40 CFR 124.8 and 124.56.

C. The Division will publish notice of its intent to issue the TMSP for storm water discharges associated with industrial activity and notice of one or more public hearings to receive comments on the draft permit.

Tennessee Storm Water
Multi-Sector General Permit
For Industrial Activities,
Rationale

At least 30 days notice will be given for the public hearings. Comments will be received at least 10 ten days after the last hearing. Any interested person may request copies of the Rationale Sheet and draft permit and submit written comments on the draft permit.

For additional information contact:

Mr. Vojin Janjic
Tennessee Division of Water Pollution Control
6th Floor L & C Annex
401 Church Street
Nashville, TN 37243-1534

Phone: (615) 532-0670
E-mail: TDECstormwater@mail.state.tn.us
URL: <http://www.state.tn.us/environment/permits/tsmp.htm>

TMSP Rationale 2001.doc